



# **Socioeconomic Technical Report**

**September 2008**



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# **1. Introduction to Purple Line Study**

The Maryland Transit Administration (MTA) is preparing an Alternatives Analysis and Draft Environmental Impact Statement (AA/DEIS) to study a range of alternatives for addressing mobility and accessibility issues in the corridor between Bethesda and New Carrollton, Maryland. The corridor is located in Montgomery and Prince George's Counties, just north of the Washington, D.C. boundary. The Purple Line would provide a rapid transit connection along the 16-mile corridor that lies between the Metrorail Red Line (Bethesda and Silver Spring Stations), Green Line (College Park Station), and Orange Line (New Carrollton Station). This *Socioeconomic Technical Report* presents the findings of the socioeconomic study. This study was conducted in accordance with the National Environmental Policy Act (NEPA) to assess the potential effects of each alternative on the quality of the human environment, including mobility, private property, the economy, compatibility with county master plans, and quality of life. Data obtained during this study has been summarized into the AA/DEIS.

## **1.1. Background and Project Location**

Changing land uses in the Washington, D.C. area have resulted in more suburb-to-suburb travel, while the existing transit system is oriented toward radial travel in and out of downtown Washington, D.C. The only transit service available for east-west travel is bus service, which is slow and unreliable. A need exists for efficient, rapid, and high capacity transit for east-west travel. The Purple Line would serve transit patrons whose journey is solely east-west in the corridor, as well as those who want to access the existing north-south rapid transit services, particularly Metrorail and MARC commuter rail service.

The corridor has a sizeable population that already uses transit and contains some of the busiest transit routes and transfer areas in the Washington, D.C. metropolitan area. Many communities in the corridor have a high percentage of households without a vehicle, and most transit in these communities is bus service. Projections of substantial growth in population and employment in the corridor indicate a growing need for transit improvements. The increasingly congested roadway system does not have adequate capacity to accommodate the existing average daily travel demand, and congestion on these roadways is projected to worsen as traffic continues to grow through 2030.

A need exists for high quality transit service to key activity centers and to improve transit travel time in the corridor. Although north-south rapid transit serves parts of the corridor, transit users who are not within walking distance of these services must drive or use slow and unreliable buses to access them. Faster and more reliable connections along the east-west Purple Line Corridor to the existing radial rail lines (Metrorail and MARC trains) would improve mobility and accessibility. This enhanced system connectivity would also help to improve transit efficiencies. In addition, poor air quality in the region needs to be addressed, and changes to the existing transportation infrastructure would help in attaining federal air quality standards.







All alternatives extend the full length of the corridor between the Bethesda Metro Station in the west and the New Carrollton Metro Station in the east, with variations in alignment, type of running way (shared, dedicated, or exclusive), and amount of grade-separation options (e.g., tunnel segments or aerial). For purposes of evaluation, complete alignments need to be considered. These alternatives were used to examine the general benefits, costs, and impacts for serving major market areas within the corridor.

### ***1.2.1. Alternative 1: No Build Alternative***

The No Build Alternative is used as the baseline against which the other alternatives are compared for purposes of environmental and community impacts. The No Build Alternative consists of the transit service levels, highway networks, traffic volumes, and forecasted demographics for horizon year 2030 that are assumed in the local Constrained Long Range Plan of the local metropolitan planning organization (in this case, the Metropolitan Washington Council of Governments).

### ***1.2.2. Alternative 2: TSM Alternative***

The TSM Alternative provides an appropriate baseline against which all major investment alternatives are evaluated for the Federal Transit Administration's New Starts funding program. The New Starts rating and evaluation process begins when the project applies to enter preliminary engineering and continues through final design.

The TSM Alternative represents the best that can be done for mobility in the corridor without constructing a new transitway. Generally, the TSM Alternative emphasizes upgrades in transit service through operational and minor physical improvements, plus selected highway upgrades through intersection improvements, minor widening, and other focused traffic engineering actions. A TSM Alternative normally includes such features as bus route restructuring, shortened bus headways, expanded use of articulated buses, reserved bus lanes, express and limited-stop service, signalization improvements, and timed-transfer operations.

### ***1.2.3. Build Alternatives***

The six Build Alternatives generally use the same alignments; only a few segments have locations where different roadways would be used. The differences between the alternatives are more often the incorporation of design features, such as grade separation to avoid congested roadways or intersections.

### **Alternative 3: Low Investment BRT**

The Low Investment BRT Alternative would primarily use existing streets to avoid the cost of grade separation and extensive reconstruction of existing streets. It would incorporate signal, signage, and lane improvements in certain places. This alternative would operate mostly in mixed lanes with at-grade crossings of all intersections and queue jump lanes at some intersections. Southbound along Kenilworth Avenue and westbound along Annapolis Road, Low Investment BRT would operate in dedicated lanes. This is the only alternative that would operate on Jones Bridge Road, directly serving the National Institutes of Health and the National





Naval Medical Center near Wisconsin Avenue and Jones Bridge Road. It is also the only alternative that would use the bus portion of the new Silver Spring Transit Center (SSTC). A detailed description of the alternative follows.

From the western terminus in Bethesda, Low Investment BRT would originate at the Bethesda Metro Station bus terminal. The alignment would operate on Woodmont Avenue within the existing curb. At the Bethesda Station, the buses would enter the station via Edgemoor Road and exit onto Old Georgetown Road.

At Wisconsin Avenue, just south of Jones Bridge Road, the transitway would remain on the west side of the road in exclusive lanes. Low Investment BRT would turn onto Jones Bridge Road where the transit would operate in shared lanes with queue jump lanes westbound at the intersection with Wisconsin Avenue and westbound for the intersection at Connecticut Avenue. Some widening would be required at North Chevy Chase Elementary School.

The alignment would continue along Jones Bridge Road to Jones Mill Road where it would turn right (south) onto Jones Mill Road. Eastbound on Jones Bridge Road would be a queue jump lane at the intersection. From Jones Mill Road, the alignment would turn east onto the Georgetown Branch right-of-way, where a new exclusive roadway would be constructed, with an adjacent trail on the south side.

Low Investment BRT would continue on the Georgetown Branch right-of-way, crossing Rock Creek Park on a new bridge, replacing the existing pedestrian bridge. The trail would also be accommodated on the bridge or on an adjacent bridge. A trail connection to the Rock Creek Trail would be provided east of the bridge. The alignment would continue on the Georgetown Branch right-of-way until the CSX corridor at approximately Kansas Avenue.

At this point, the alignment would turn southeast to run parallel and immediately adjacent to the CSX tracks on a new exclusive right-of-way. The trail would parallel the transitway, crossing the transitway and the CSX right-of-way east of Talbot Avenue on a new structure and continuing on the north side of the CSX right-of-way. The transitway would continue on a new roadway between the CSX tracks and Rosemary Hills Elementary School and continue past the school. The transitway would cross 16<sup>th</sup> Street at -grade, where a station would be located. The transitway would continue parallel to the CSX tracks to Spring Street where it would connect to Spring Street and turn to cross over the CSX tracks on Spring Street. The alignment would continue on Spring Street to 2<sup>nd</sup> Avenue where it would turn east. Buses would operate in shared lanes on Spring Street and Second Avenue.

Low Investment BRT would cross Colesville Road at-grade and continue up Wayne Avenue to Ramsey Street, where the buses would turn right to enter the SSTC at the second level.

The buses would leave the SSTC and return to Wayne Avenue via Ramsey Street. Low Investment BRT would continue east on Wayne Avenue in shared lanes. After crossing Sligo Creek Parkway, the alignment would operate in shared lanes.



At Flower Avenue, the alignment would turn left (south) onto Arliss Street, operating in shared lanes to Piney Branch Road. At Piney Branch Road, the alignment would turn left to continue in shared lanes to University Boulevard.

Low Investment BRT would follow University Boulevard to Adelphi Road. The lanes on University Boulevard would be shared. At Adelphi Road, the alignment would enter the University of Maryland campus on Campus Drive. The alignment would follow the Union Drive extension, as shown in the University of Maryland Facilities Master Plan (2001-2020), through what are currently parking lots. The alignment would follow Union Drive and then Campus Drive through campus in mixed traffic and the main gate to US 1.

Low Investment BRT would operate on Paint Branch Parkway to the College Park Metro Station in shared lanes. The alignment would then follow River Road to Kenilworth Avenue in shared lanes. Along Kenilworth Avenue, the southbound alignment would be a dedicated lane, but northbound would be in mixed traffic.

The alignment turns east from Kenilworth Avenue on East West Highway (MD 410) and continues in shared lanes on Veterans Parkway. This alignment turns left on Annapolis Road and then right on Harkins Road to the New Carrollton Metro Station. The westbound alignment on Annapolis would be dedicated, but the eastbound lanes would be shared.

#### **Alternative 4: Medium Investment BRT**

Alternative 4, the Medium Investment BRT Alternative, is, by definition, an alternative that uses the various options that provide maximum benefit relative to cost. Most of the segments are selected from either the Low or High Investment BRT Alternatives.

This alternative follows a one-way counter-clockwise loop from the Georgetown Branch right-of-way onto Pearl Street, East West Highway, Old Georgetown Road, Edgemoor Lane, and Woodmont Avenue and from there onto the Georgetown Branch right-of-way under the Air Rights Building. The buses stop at both the existing Bethesda Metro Station on Edgemoor Lane and at the new southern entrance to the Metro station under the Air Rights Building.

The alignment continues on the Georgetown Branch right-of-way with an aerial crossing over Connecticut Avenue and a crossing under Jones Mill Road.

This alignment, and all others that use the Georgetown Branch right-of-way, includes construction of a hiker-biker trail between Bethesda and the SSTC.

The alignment would continue on the Georgetown Branch right-of-way until the CSX right-of-way. The alignment would cross Rock Creek Park on a new bridge, replacing the existing pedestrian bridge. The trail would also be accommodated on the bridge or on an adjacent bridge. The alignment would continue on the Georgetown Branch right-of-way until the CSX corridor at approximately Kansas Avenue. This segment of the alignment, from Jones Mill Road to the CSX corridor, would be the same for all the alternatives.



As with Low Investment BRT, this alternative would follow the CSX corridor on the south side of the right-of-way, but it would cross 16<sup>th</sup> Street and Spring Street below the grade of the streets, at approximately the same grade as the CSX tracks. The station at 16<sup>th</sup> Street would have elevators and escalators to provide access from 16<sup>th</sup> Street.

After passing under the Spring Street Bridge, Medium Investment BRT would rise above the level of the existing development south of the CSX right-of-way. East of the Falklands Chase apartments, Medium Investment BRT would cross over the CSX tracks on an aerial structure to enter the SSTC parallel to, but at a higher level than, the existing tracks.

After the SSTC, Medium Investment BRT would leave the CSX right-of-way and follow Bonifant Street at-grade, crossing Georgia Avenue, and just prior to Fenton Street turn north toward Wayne Avenue. The alignment would continue on Wayne Avenue in shared lanes with added left turn lanes to Flower Avenue and then Arliss Street. At Piney Branch Road, the alternative would turn left into dedicated lanes to University Boulevard.

Medium Investment BRT would be in dedicated lanes on University Boulevard with an at-grade crossing of the intersections. The alignment would continue through the University of Maryland campus in dedicated lanes on Campus Drive and then continue at grade in a new exclusive transitway through the parking lots adjacent to the Armory and turns on to Rossborough Lane south of the Visitor's Center.

Crossing US 1 at grade, Medium Investment BRT would pass through the East Campus development on Rossborough Lane to Paint Branch Parkway. The alignment would continue on Paint Branch Parkway and River Road in shared lanes, as with Low Investment BRT. At Kenilworth Avenue, both lanes would be dedicated.

Turning left on East West Highway, Medium Investment BRT would be in dedicated lanes. As with Low Investment BRT, this alternative would travel in shared lanes on Veterans Parkway.

Medium Investment BRT would continue on Veterans Parkway to Ellin Road, where it would turn left into dedicated lanes to the New Carrollton Metro Station.

#### **Alternative 5: High Investment BRT via Master Plan Alignment**

The High Investment BRT Alternative is intended to provide the most rapid travel time for a BRT alternative. It would make maximum use of vertical grade separation and horizontal traffic separation. Tunnels and aerial structures are proposed at key locations to improve travel time and reduce delay. When operating within or adjacent to existing roads, this alternative would operate primarily in dedicated lanes. Like Medium Investment BRT, this alternative would serve the Bethesda Station both at the existing Bethesda bus terminal at the Metro station and at the new south entrance to the Metro station beneath the Apex Building.

High Investment BRT would follow a one-way loop in Bethesda from the Master Plan alignment onto Pearl Street, then travel west on East West Highway and Old Georgetown Road into the Bethesda Metro Station bus terminal, exit onto Woodmont Avenue southbound, and then



continue left under the Air Rights Building to continue on the Georgetown Branch right-of-way. Elevators would provide a direct connection to the south end of the Bethesda Metro Station in the tunnel under the Air Rights Building.

High Investment BRT would be the same as Medium Investment BRT until it reaches the CSX corridor. As with the Low and Medium Investment BRT Alternatives, this alternative would follow the CSX corridor on the south side of the right-of-way, but it would cross 16<sup>th</sup> Street and Spring Street below the grade of the streets, at approximately the same grade as the CSX tracks. The station at 16<sup>th</sup> Street would have elevators and escalators to provide access from 16<sup>th</sup> Street.

The crossing of the CSX right-of-way would be the same as for Medium Investment BRT. From the SSTC, High Investment BRT would continue along the CSX tracks until Silver Spring Avenue, where the alignment would turn east entering a tunnel, passing under Georgia Avenue, and turning north to Wayne Avenue. The alignment would return to the surface on Wayne Avenue near Cedar Street. It would continue on Wayne Avenue in dedicated lanes, crossing Sligo Creek Parkway, and entering a tunnel approximately half-way between Sligo Creek and Flower Avenue, then turning east to pass under Plymouth Street, crossing under Flower Avenue, and emerging from the tunnel on Arliss Street.

High Investment BRT would be the same on Piney Branch Road and University Boulevard except that the alignment would have grade-separated crossings over New Hampshire Avenue and Riggs Road.

Approaching University of Maryland, the alignment would cross under Adelphi Road. After Adelphi Road, the alignment would follow Campus Drive and turn onto the proposed Union Drive extended. The alignment would enter a tunnel while on Union Drive, prior to Cole Field House, and pass through the campus under Campus Drive. After emerging from the tunnel east of Regents Drive, the alignment would be the same as Medium Investment BRT, until Paint Branch Parkway.

The alignment would continue east on Paint Branch Parkway in dedicated lanes, except under the CSX overpass, to the College Park Metro Station. The alternative would then follow River Road in dedicated lanes. The alignment would be dedicated on these roadways, except under the CSX Bridge on Paint Branch Parkway.

From River Road (also in dedicated lanes) near Haig Drive, the alignment would turn right and enter a tunnel heading south, roughly parallel to Kenilworth Avenue. Near East West Highway (MD 410), the alignment would turn left and continue in the tunnel under Anacostia River Park. The alignment would transition to a surface alignment west of the Kenilworth Avenue/East West Highway intersection. The alternative would follow East West Highway in dedicated lanes.

High Investment BRT would turn right down Veterans Parkway in dedicated lanes. Unlike Medium Investment BRT, this alignment would cross under Annapolis Road before continuing on to Ellin Road.

### **Alternative 6: Low Investment LRT**

The Low Investment LRT Alternative would operate in shared and dedicated lanes with minimal use of vertical grade separation and horizontal traffic separation. All LRT Alternatives would serve only the south entrance of the Bethesda Station and would operate there in a stub-end platform arrangement.

Low Investment LRT would begin on the Georgetown Branch right-of-way near the Bethesda Metro Station under the Air Rights Building. The hiker-biker trail connection to the Capital Crescent Trail would not be through the tunnel under the Air Rights Building, but rather through Elm Street Park on existing streets. The terminal station would be the Bethesda Metro Station with a connection to the southern end of the existing station platform.

After emerging from under the Air Rights Building, the transitway would follow the Georgetown Branch right-of-way, crossing Connecticut Avenue at-grade and crossing under Jones Mill Road. Between approximately Pearl Street and just west of Jones Mill Road, the trail would be on the north side of the transitway; elsewhere it would be on the south side.

The segment from Jones Mill Road to Spring Street in the CSX corridor would be the same as for Low and Medium Investment BRT.

After crossing Spring Street, Low Investment LRT would be the same as the Medium and High Investment BRT Alternatives.

Low Investment LRT would be the same as Medium Investment BRT from the SSTC to Bonifant Street to Wayne Avenue.

Turning right, Low Investment LRT would continue at-grade on Wayne Avenue in shared lanes, crossing Sligo Creek Parkway and entering a tunnel from Wayne Avenue to pass under Plymouth Street. As with High Investment BRT, the alignment emerges from the tunnel on Arliss Street.

The Low Investment LRT Alternative would then follow Piney Branch Road and University Boulevard at-grade in dedicated lanes. In keeping with the low investment definition of this alternative, the major intersections of New Hampshire Avenue and Riggs Road would not be grade-separated.

As this alternative approaches Adelphi Road, the grade of the existing roadway is too steep for the type of LRT vehicles being considered. For this reason, the transitway would cross the intersection below grade.

At Adelphi Road, the alignment would enter the University of Maryland campus on Campus Drive. The alignment would follow the same alignment to the College Park Metro Station as described for Medium Investment BRT.



From the College Park Metro Station to the terminus at the New Carrollton Metro Station, Low Investment LRT would be in dedicated lanes on River Road. On Kenilworth Avenue, the LRT would be in a dedicated lane southbound, but a shared lane northbound. On East West Highway, the LRT would be in dedicated lanes with shared left turn lanes and in shared lanes under Baltimore-Washington Parkway. On Veterans Parkway, the LRT is in dedicated lanes.

As with Low Investment BRT, this alignment turns left on Annapolis Road from Veterans Parkway and then right on Harkins Road to the New Carrollton Metro Station. The segments on Annapolis Road and Harkins Lane would be dedicated.

#### **Alternative 7: Medium Investment LRT**

Medium Investment LRT is the same as Low Investment LRT from Bethesda to the CSX corridor, except that the alignment would cross over Connecticut Avenue.

Along the CSX corridor, the alignment would be the same as High Investment BRT, grade-separated (below) at 16<sup>th</sup> and Spring Streets. The alignment would be the same as Medium and High Investment BRT and Low Investment LRT from Spring Street through the SSTC.

From the SSTC, the alignment would follow Bonifant Street in dedicated lanes to Wayne Avenue. On Wayne Avenue, this alternative would be in shared lanes with added left turn lanes. The alignment would be the same as Low Investment LRT until Paint Branch Parkway, where it would be in dedicated lanes, except under the CSX/Metro tracks at the College Park Metro Station, except for Paint Branch Parkway where it would be in dedicated lanes. The LRT follows River Road, Kenilworth Avenue, East West Highway, and Veterans Parkway in dedicated lanes. At the intersection of Veterans Parkway and Annapolis Road the LRT continues across Annapolis, turning left at Ellin Road still in dedicated lanes.

#### **Alternative 8: High Investment LRT**

Alternative 8, High Investment LRT, would be the same as the High Investment BRT Alternative, except for the Bethesda terminus. The alignment would begin just west of the tunnel under the Air Rights Building. The hiker-biker trail would follow the alignment through the tunnel under the Air Rights Building. Because of physical constraints, the trail would be elevated above the westbound tracks. The trail would return to grade as it approaches Woodmont Avenue. The terminal station would be the Bethesda Metro Station with a connection to the southern end of the existing station platform.

### ***1.2.4. Design Options***

#### **North Side of CSX**

This design option is based on the Georgetown Branch Master Plan. From the eastern end of the Georgetown Branch right-of-way, the alignment would cross under the CSX corridor and then continue down the north side. It would emerge from the tunnel near Lyttonsville Road in Woodside. The alignment would be below the grade of 16<sup>th</sup> Street, passing under the bridge, but providing a station at that location. It would also pass under the Spring Street Bridge but would begin to rise on an aerial structure over the CSX right-of-way 1,000 feet northwest of Colesville

Road due to the location of the Metro Plaza Building. The aerial structure over the CSX right-of-way would provide the required 23-foot clearance from top of rail to bottom of structure. The alternative would enter the SSTC parallel to, but at a higher level than, the existing tracks.

### **South Side of CSX with a Crossing West of the Falklands Chase Apartments**

This option would operate on the south side of the CSX, as described either at or below grade at 16<sup>th</sup> Street. The alignment would cross the CSX corridor between Spring Street and Fenwick Lane. This option would continue along the north side of the CSX right-of-way on an aerial structure over the CSX right-of-way 1,000 feet northwest of Colesville Road, due to the location of the Metro Plaza Building. The aerial structure over the CSX right-of-way would provide the required 23-foot clearance from top of rail to bottom of structure. The alternative would enter the SSTC parallel to, but at a higher level than, the existing tracks.

### **Silver Spring/Thayer Tunnel**

This design option would begin at the SSTC where the alignment leaves the CSX corridor near Silver Spring Avenue. It would enter a tunnel on Silver Spring Avenue passing under Georgia Avenue and Fenton Street. At approximately Grove Street, the alignment would shift northward to continue under the storm drain easement and backyards of homes on Thayer and Silver Spring Avenues. The transitway would emerge from the tunnel behind the East Silver Spring Elementary School on Thayer Avenue and follow Thayer Avenue across Dale Drive to Piney Branch Road. If the mode selected were LRT, the grade of Piney Branch Road would require an aerial structure from west of Sligo Creek and Sligo Creek Parkway and would return to grade just west of Flower Avenue. This aerial structure requires that the road be widened. For this design option, a station would be located on Thayer Avenue where the alignment would emerge from the tunnel.

### **Preinkert/Chapel Drive**

The Preinkert/Chapel Drive design option is being evaluated for both BRT and LRT through the campus of University of Maryland. The alignment would run from the west on Campus Drive turning right onto Preinkert Drive where it would head southeast. The transitway would turn left to pass directly between LeFrak Hall and the South Dining Campus Hall and then northeast through the Lot Y parking lot. From there, the alignment would run east along Chapel Drive between Memorial Chapel and Marie Mount Hall and eventually would pass to the south of Lee Building at Chapel Fields. The alignment would continue onto Rossborough Lane, passing directly north of Rossborough Inn to cross US 1, and continues east through the East Campus development.

### ***1.2.5. Stations and Station Facilities***

Between 20 and 21 stations are being considered for each of the alternatives. Table 1-1 provides the stations for each of the Build Alternatives.



**Table 1-1: Stations by Alternative**

| Segment Name                         | Low Invest. BRT | Medium Invest. BRT | High Invest. BRT | Low Invest. LRT | Medium Invest. LRT | High Invest. LRT |
|--------------------------------------|-----------------|--------------------|------------------|-----------------|--------------------|------------------|
| Bethesda Metro, North Entrance       | Yes             | Yes                | Yes              | N/A             | N/A                | N/A              |
| Medical Center Metro                 | Yes             | N/A                | N/A              | N/A             | N/A                | N/A              |
| Bethesda Metro, South Entrance       | N/A             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Connecticut Avenue                   | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Lyttonsville                         | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Woodside/16 <sup>th</sup> Street     | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Silver Spring Transit Center         | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Fenton Street                        | Yes             | Yes                | N/A              | Yes             | Yes                | N/A              |
| Dale Drive                           | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Manchester Place                     | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Arliss Street                        | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Gilbert Street                       | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Takoma/Langley Transit Center        | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Riggs Road                           | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Adelphi Road                         | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| University of Maryland Campus Center | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| US 1                                 | Yes             | N/A                | N/A              | N/A             | N/A                | N/A              |
| East Campus                          | N/A             | Yes                | Yes              | Yes             | Yes                | Yes              |
| College Park Metro                   | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| River Road                           | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Riverdale Park                       | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Riverdale Road                       | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| Annapolis Road                       | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |
| New Carrollton Metro                 | Yes             | Yes                | Yes              | Yes             | Yes                | Yes              |

N/A - Not applicable

The design of the Purple Line stations has not been determined at this stage of the project; however, the stations are expected to include the following elements: shelters, ticket vending machines, seating, and electronic schedule information. The stations would be located along the transitway and would be on local sidewalks or in the median of the streets, depending on the location of the transitway. Because both the BRT and LRT vehicles under consideration are “low floor,” the platforms would be about 14 inches above the height of the roadway. The platforms would be approximately 200 feet long and between 10 and 15 feet wide, depending on the anticipated level of ridership at each particular station. No new parking facilities would be constructed as part of the Purple Line. Municipal parking garages exist near the Bethesda and Silver Spring Metro Stations, and transit parking facilities exist at the College Park and New Carrollton Metro Stations.

Additional kiss-and-ride facilities would be considered at the stations at Connecticut Avenue on the Georgetown Branch right-of-way and Lyttonsville. The SSTC, College Park Metro Station, and New Carrollton Metro Station already have kiss-and-ride parking facilities available and the



Purple Line would not add more. It has been determined that kiss-and-ride facilities are not needed at the Takoma/Langley Transit Center.

#### ***1.2.6. Maintenance and Storage Facilities***

LRT and BRT both require maintenance and storage facilities; however, the requirements in terms of location and size are not the same. LRT requires a facility located along the right-of-way while a BRT facility can be located elsewhere. Depending on the construction phasing and mode chosen, two maintenance facilities (one in Montgomery County and one in Prince George's County) are ideal.

The size of the facility depends on the number of vehicles required. A fleet of 40 to 45 LRT vehicles or 40 to 60 buses (including spares) would require approximately 20 acres. The Purple Line would also require storage for non-revenue vehicles and equipment such as: maintenance, supervisory, and security vehicles.

Activities at the maintenance and storage facility would include:

- Vehicle Storage area (tracks for LRT)
- Inspection/Cleaning
- Running Repairs
- Maintenance/Repair
- Operations/Security
- Parking
- Materials/Equipment Storage

Two sites improve operations by providing services and storage near the ends of the alignment. It is possible to have one site provide the majority of the services and the other function as an auxiliary site.

Five potential sites were identified during the course of the alternatives analysis and were evaluated for environmental impacts. As part of the screening process three were eliminated from further consideration. These five sites are listed below:

- Lyttonsville – This is a maintenance facility on Brookville Road in Lyttonsville, currently used by Montgomery County Ride On buses and school buses. The Purple Line would require the use of some additional adjacent property.
- Haig Court – This site is located on River Road at Haig Court. It would require minimal grading, but is partly wooded, and is very close to the residential neighborhood of Riverdale which is also a historic district.
- North Veterans Parkway – This site is located on the north side of Veterans Parkway. This site is heavily wooded and includes steep grades.



- Glenridge Maintenance Facility – This site is located on the south side of Veterans Parkway near West Lanham Shopping Center. It is currently being used as a maintenance facility for Prince George’s County Park vehicles.
- MTA New Carrollton property – This site is a parcel owned but the MTA on the east side of the New Carrollton Metro station. It is not particularly well located for use by the Purple Line because it would require the Purple Line to pass under or around the New Carrollton Metro Station.

The Lyttonsville site and the Glenridge Maintenance Facility were identified as the two sites most appropriate for maintenance and storage facilities for the project based on potential environmental effects and location. These two sites would provide sufficient capacity for either BRT or LRT operations; and are well located near either end of the alignment.

#### ***1.2.7. Traction Power Substations***

Light rail’s electric traction power system requires electrical substations approximately every 1.25 miles, depending on the frequency and size of the vehicles. These substations, which are approximately 10 feet by 40 feet, do not need to be immediately adjacent to the tracks. This flexibility means the substations can be located to minimize visual intrusions and can be visually shielded by fencing, landscaping, or walls, or can be incorporated into existing buildings. The number and location of these substations will be determined during the preliminary engineering phase of project development.



## 2. Socioeconomic Study

The purpose of the socioeconomic analysis is to identify whether the proposed alternatives would:

- Affect the quality of life or change community interaction within the corridor
- Cause changes in land use and whether those anticipated changes would be compatible or not with existing conditions and plans set forth by local planning agencies
- Cause economic changes by altering the access and travel routes to existing and planned businesses
- Facilitate or disrupt access to public facilities, such as schools, emergency services, or recreational features
- Require right-of-way acquisitions and create residential or business displacements
- Cause disproportionate effects on low-income or minority populations within the corridor

The process used to identify potential socioeconomic and land use effects of the Purple Line was as follows:

- **Determination of Study Area Boundary.** A study area boundary that would be appropriate to socioeconomic and land use issues was identified.
- **Identification of Existing and Planned Future Conditions.** A thorough understanding of the study area's social, economic, and land use characteristics was developed through a variety of sources and research techniques. These sources and techniques included the following:
  - Reviewing Census 2000 data to identify general demographic and income data for the project area
  - Reviewing public school data from the 2004-2005 school years regarding race and the number of students receiving free or reduced-price lunch
  - Interviewing county planners and others to identify non-published social, land use, or economic issues within the local community areas, including the presence of low-income or minority populations that might not be readily identified through census data
  - Reviewing Master Plans and local planning documents for Montgomery and Prince George's Counties to obtain data about existing and proposed land use
  - Researching regional and local economic information to obtain data about current and projected business trends
  - Making field observations pertaining to the nature and characteristics of each community within the study area
- **Evaluation of Effect of Proposed Alternatives.** The conceptual engineering design and the results of other technical analyses, such as air quality and noise impact studies, were examined to identify whether the project could:

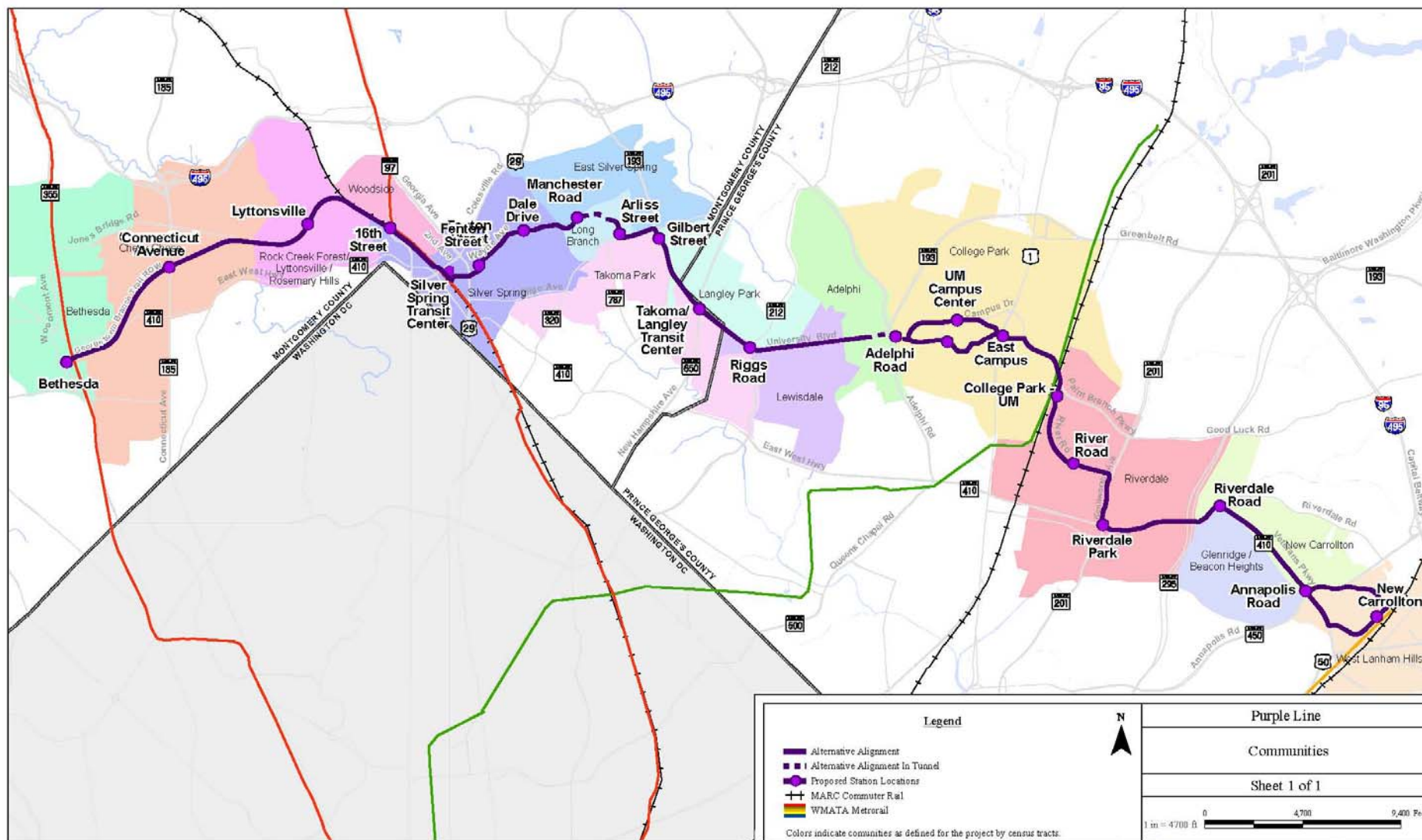


- Displace residents or businesses
- Cause disproportionately high and adverse environmental effects to low-income or minority populations
- Create wall or barrier effects that disrupt or prevent community cohesion
- Change the manner in which residents access their homes
- Change access to community resources, such as educational, religious, health care, parkland and recreational, transportation, and other facilities, or affect the ability of these facilities to provide services to the public
- Effect the quality of life by decreasing air quality or increasing noise or vibration levels
- Change the overall aesthetic character of the area
- Change the county or local economy
- Directly affect businesses
- Alter or preclude any future land use plans
- Comply with Maryland's Smart Growth initiative

## **2.1. Socioeconomic Study Area**

The socioeconomic study area is composed of block groups as defined by the 2000 U.S. Census. Block groups are the smallest unit for which much of the demographic and income data are available. The selected block groups are within a 200-foot boundary of the Purple Line alignments or a quarter-mile boundary of Purple Line stations. This boundary generally reflects the area where impacts could potentially occur due to the Purple Line. The study area was further divided into 16 neighborhoods of varying sizes by clustering block groups to loosely resemble existing communities, as shown on Figure 2-1. Neighborhoods were identified based on similarities in elements, such as access to major transportation routes and facilities, and natural and man-made boundaries.

Because block groups are not delineated solely based on established community boundaries, the names and boundaries of the neighborhoods used in this analysis may differ from the perceptions of some residents.



**FIGURE 2-1: COMMUNITIES IN STUDY AREA**



### 3. Social Characteristics and Potential Effects

This section presents a description of the existing social environment and potential effects associated with each of the Purple Line alternatives. This includes a discussion of demographics and community resources followed by a comparison of potential effects to those resources by each alternative.

#### 3.1. Social Characteristics

The following describes the baseline socioeconomic conditions, minority and low-income profiles, and populations of neighborhoods within the study area. The population and demographic data for this social environment discussion was analyzed using census block groups provided by the U.S. Census 2000 (Census 2000) Summary File 3.

##### 3.1.1. Regional Characteristics

The State of Maryland, Prince George's and Montgomery Counties are experiencing population growth, which is projected to continue until at least 2030 (see Table 3-1). Montgomery County is projected to increase its population to well over one million people by 2030. Although less growth is anticipated in Prince George's County, the population should reach nearly a million people in the same timeframe. Both counties have a mix of rural, suburban, and urbanized areas, and county plans concentrate population growth and density within already developed areas. The five most populous places in Montgomery County are Silver Spring, Wheaton-Glenmont, Bethesda, Germantown, and Gaithersburg; Silver Spring and Bethesda are in the Purple Line corridor.

**Table 3-1: Regional Population and Growth**

|                     | 1990      | 2000      | 2006      | 2030      | Change<br>1990-<br>2000 | Change<br>2000-<br>2006 | Change<br>2006-<br>2030 |
|---------------------|-----------|-----------|-----------|-----------|-------------------------|-------------------------|-------------------------|
| Maryland            | 4,781,500 | 5,296,486 | 5,615,727 | 6,729,500 | 10.8%                   | 6.0%                    | 19.8%                   |
| Montgomery Co.      | 757,027   | 873,341   | 932,131   | 1,145,000 | 15.4%                   | 6.7%                    | 22.8%                   |
| Prince George's Co. | 729,268   | 801,515   | 841,315   | 985,200   | 9.9%                    | 5.0%                    | 17.1%                   |

Source: Maryland Department of Planning, Maryland State Data Center, 2006

Both Montgomery and Prince George's Counties have diverse populations. According to Census 2000, the percentages of Asian and Hispanic populations in Montgomery County are nearly three times the percentages of Maryland's Asian and Hispanic populations. More than 60 percent of the residents of Prince George's County are Black, more than double the percentage in the State of Maryland (see Table 3-2). Based on the U.S. Census Bureau's 2006 estimates, racial distribution has not changed substantially in Montgomery and Prince George's Counties since Census 2000.



**Table 3-2: Regional Population and Racial and Ethnic Demographics**

| Category                                       | Maryland  | Montgomery County | Prince George's County |
|------------------------------------------------|-----------|-------------------|------------------------|
| Population                                     | 5,296,486 | 873,341           | 801,515                |
| <i>Racial Distribution of Total Population</i> |           |                   |                        |
| White only                                     | 64%       | 65%               | 27%                    |
| African-American or Black only                 | 28%       | 15%               | 63%                    |
| American Indian/Native Alaskan only            | <1%       | <1%               | <1%                    |
| Asian                                          | 4%        | 11%               | 4%                     |
| Native Hawaiian/Pacific Islander only          | <1%       | <1%               | <1%                    |
| Other Race                                     | 2%        | 5%                | 3%                     |
| Two or More Races                              | 2%        | 4%                | 3%                     |
| Hispanic Population                            | 4%        | 11%               | 7%                     |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The US Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

Montgomery and Prince George's Counties are both affluent. Maryland has the second-highest median household income in the nation, and in 1999 both counties had higher median household incomes and fewer people living below the federal poverty level than the State of Maryland (see Table 3-3). Since Census 2000, median household incomes in both counties have increased by more than \$15,000 and continue to exceed Maryland's median household income.

**Table 3-3: Regional Poverty and Median Household Income**

| Category                    | Maryland    |             | Montgomery County |             | Prince George's County |             |
|-----------------------------|-------------|-------------|-------------------|-------------|------------------------|-------------|
|                             | 1999        | 2004        | 1999              | 2004        | 1999                   | 2004        |
| People Living Below Poverty | 8.5%        | 9.2%        | 5.4%              | 6.5%        | 7.7%                   | 9.3%        |
|                             | <b>1999</b> | <b>2006</b> | <b>1999</b>       | <b>2006</b> | <b>1999</b>            | <b>2006</b> |
| Median Household Income     | \$52,868    | \$66,600    | \$71,551          | \$87,500    | \$55,256               | \$70,250    |

Source: Maryland Department of Planning Maryland State Data Center, 2006

As shown in Table 3-4, Census 2000 indicates that there are 637,010 housing units located in Montgomery and Prince George's Counties. These counties comprised nearly 30 percent of all housing units in Maryland. Although vacancy rates constantly vary, these two counties had lower vacancy rates than the state as a whole during the last census. Owner-occupied housing units comprised 69 percent and 62 percent of the housing units in Montgomery and Prince George's Counties, respectively. Housing growth is anticipated in both counties to support the projected population growth.

**Table 3-4: Regional Housing Demographics**

| Category                   | Maryland  | Montgomery County | Prince George's County |
|----------------------------|-----------|-------------------|------------------------|
| Housing Units              | 2,145,283 | 334,632           | 302,378                |
| Owner-Occupied Households  | 68%       | 69%               | 62%                    |
| Renter-Occupied Households | 32%       | 31%               | 38%                    |
| Vacant Residences          | 7.7%      | 3.0%              | 5.2%                   |

Source: U.S. Census Bureau, Census 2000, Summary File 3

### **3.1.2. Study Area Characteristics**

The Purple Line corridor lies within southeastern Montgomery County and northern Prince George's County in the Washington, D.C. metropolitan area. The study area is considered to be within the suburbs of Washington, D.C.; however, many communities are highly urbanized with high population densities. The study area contains portions of several incorporated cities, unincorporated U.S. Census designated places (CDP), and named, yet unincorporated communities. These include Bethesda, Chevy Chase, North Chevy Chase, Forest Glen Park, Silver Spring, Takoma Park, Langley Park, Adelphi, College Park, Riverdale, Riverdale Park, East Riverdale, Riverdale Heights, New Carrollton, and West Lanham Hills. Many residents commute to employment centers throughout the Washington, D.C. metropolitan area. Land use patterns in the area have been influenced by long-established transportation corridors and stream valleys.

At the time of Census 2000, there were approximately 141,000 people living in the study area; see Table 3-5 for the demographic make up. The study area's population is racially diverse, with 46 percent White, 31 percent Black, and 6 percent Asian. In 2000, for the first time, the U.S. Census Bureau recorded Hispanic ethnicity, as separate from race. Twenty four percent of the population identified themselves as Hispanic.

The Montgomery County portion of the study area's Black and Hispanic population percentages is larger than those of the entire county. The Prince George's County portion of the study area has a smaller Black population percentage and more than double the Hispanic population percentage than the county as a whole.

The portions of the counties within the study area also have a higher percentage of people living below the federal poverty level than the respective counties' percentages. Approximately 12 percent of the study area population is living below the poverty level. Likewise, median household incomes are substantially lower in the study area than in the counties. The Montgomery County portion of the study area has a median household income that is \$20,000 less than that of the county; for Prince George County, there is about a \$10,000 divergence. The median household income of the individual block groups that comprise the study area range from -\$2,500 to \$179,623.





**Table 3-5: Study Area Demographics**

| Category                                       | Study Area | Montgomery County | Prince George's County | Montgomery County Portion of the Study Area | Prince George's Portion of the Study Area |
|------------------------------------------------|------------|-------------------|------------------------|---------------------------------------------|-------------------------------------------|
| Population                                     | 140,981    | 873,341           | 801,515                | 71,762                                      | 69,219                                    |
| <i>Racial Distribution of Total Population</i> |            |                   |                        |                                             |                                           |
| White only                                     | 46%        | 65%               | 27%                    | 51%                                         | 40%                                       |
| African-American or Black only                 | 31%        | 15%               | 63%                    | 26%                                         | 37%                                       |
| American Indian/ Native Alaskan only           | <1%        | <1%               | <1%                    | <1%                                         | <1%                                       |
| Asian                                          | 6%         | 11%               | 4%                     | 7%                                          | 5%                                        |
| Native Hawaiian/Pacific Islander only          | <1%        | <1%               | <1%                    | <1%                                         | 0%                                        |
| Other Race                                     | 11%        | 5%                | 4%                     | 10%                                         | 12%                                       |
| Two or More Races                              | 5%         | 4%                | 3%                     | 5%                                          | 5%                                        |
| Hispanic Population                            | 24%        | 12%               | 7%                     | 20%                                         | 28%                                       |
| Median Household Income                        | \$48,812   | \$71,551          | \$55,256               | \$51,028                                    | \$44,937                                  |
| People Living Below Poverty                    | 12%        | 5%                | 8%                     | 9%                                          | 15%                                       |
| Using Public Transportation to Work            | 21%        | 13%               | 12%                    | 26%                                         | 16%                                       |
| Households with No Vehicle Available           | 17%        | 8%                | 11%                    | 18%                                         | 16%                                       |
| Housing Units                                  | 52,328     | 334,632           | 302,378                | 31,629                                      | 20,716                                    |
| Owner-Occupied Households                      | 40%        | 69%               | 62%                    | 37%                                         | 45%                                       |
| Renter-Occupied Households                     | 60%        | 31%               | 38%                    | 63%                                         | 55%                                       |
| Vacant Residences                              | 4%         | 3%                | 5%                     | 3%                                          | 5%                                        |
| Linguistically Isolated Households             | 13%        | 6%                | 4%                     | 10%                                         | 16%                                       |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The US Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

Seventeen percent of the households in the study area do not have a vehicle available, compared to about 8 percent and 11 percent in Montgomery and Prince George's Counties, respectively. Twenty-one percent of the study area's working population uses public transportation to commute to work. Transit use in the study area is substantially higher than transit usage throughout either county.

In 2000, approximately 52,300 housing units were in the study area, of which about 40 percent were owner-occupied. The owner-occupancy percentage for the study area is more than 20 percent lower than that for Montgomery and Prince George's Counties.



Linguistically isolated households are households where all members of the household over the age of 14 have some difficulty speaking English. More than 13 percent of households in the study area are linguistically isolated, a higher rate than either county as a whole.

The following are brief descriptions of the demographic, housing, community facility, and access and mobility characteristics of each of the 16 neighborhoods. Figures depicting each of these neighborhoods can be found in Appendix A. The neighborhoods differ in size with approximate populations ranging from 2,300 to 18,000 people; the largest being Langley Park (17,800), Silver Spring (17,200), and College Park (15,400). Overall the Hispanic population of the study area is 24 percent. The Hispanic concentrations of the neighborhoods range from four percent in Chevy Chase and College Park to 62 percent in Langley Park.

### ***3.1.3. Station Locations***

Twenty-two proposed station locations were evaluated for the Purple Line. While stations are proposed within or immediately adjacent to each of the neighborhoods, the specific location varies depending on alternative. The following is a brief description of the general surroundings at each proposed station location.

**Bethesda:** This station would be part of the existing Metrorail and Metrobus station. If the mode selected for the Purple Line is BRT the buses would use the existing bus station on Old Georgetown Road. The LRT alternatives and Medium and High Investment BRT would have a connection to the Metro station under the Air Rights building on Wisconsin Avenue, via an elevator to the existing Metrorail station. This area of downtown Bethesda is characterized by high-density office development with ground-floor retail uses. This dense, pedestrian-friendly urban setting contains 10- to 15-story buildings, with the existing Bethesda Station having intermodal transfer points at grade on Woodmont Avenue and below grade at Wisconsin Avenue. Examples of major employers at this center include the Hyatt Hotel, the Acacia Life Insurance Company, and Chevy Chase Bank. Retail uses include a large bookstore and smaller-scale retail, including numerous cafes and restaurants.

**Medical Center:** This station is part of Low Investment BRT only. It would include a direct connection to the Medical Center Metro Station platform. It serves the National Naval Medical Center and the National Institutes of Health. The area is characterized by low-density residential and large-scale institutional development set in open space. New townhouses and a single-family residential neighborhood are located to the southeast. The campus-style institutions contain multi-story buildings.

**Connecticut Avenue:** For the LRT Alternatives and Medium and High Investment BRT, the station would be located just east of Connecticut Avenue along the Georgetown Branch right-of-way. Currently containing commercial uses on the north side of the Georgetown Branch right-of-way, this area is slated for mixed-use redevelopment in the future. To the south of the station on Connecticut Avenue are a bank and a high rise office building.

For Low Investment BRT the Connecticut Avenue station would be located at the intersection of Jones Bridge Road and Connecticut Avenue. This area is a low-density residential neighborhood



with houses on the south side of Jones Bridge Road. To the southeast are the grounds of the Howard Hughes Complex, a medical research institute. Within 800 feet of the intersection to the east is North Chevy Chase Elementary School.

**Lyttonsville:** The station would be on Lyttonsville Place. To the north is Brookville Road which contains light industrial uses, to the south are residential areas, including single-family homes, garden-style apartments, and a high-rise apartment building.

**16<sup>th</sup> Street:** This area along the CSX railroad right-of-way at 16<sup>th</sup> Street is characterized by high-rise buildings and three- to four-story apartment complexes. An older neighborhood of single family homes on relatively small lots is northeast of the intersection. 16<sup>th</sup> Street passes over the CSX railroad alignment on an overpass.

**Silver Spring Transit Center:** The Silver Spring Transit Center is currently under construction. It will be part of a mixed-use high-rise WMATA joint development. Silver Spring is a high density, mixed-use downtown area that has experienced major development in the past several years. The Silver Spring Transit Center will serve the Red Line Metro line, the MARC Brunswick line, and numerous bus lines. Office buildings 10- to 15-stories high are concentrated around this station area, with older low-scale commercial uses extending north on Wayne Avenue. Commercial space in this area is generally characterized by newer construction with low vacancy rates.

**Fenton Street:** Depending on the alternative, this station would be located at one of two sites within half a block of the intersection of Wayne Avenue and Fenton Street. Both locations are within a short walking distance of the Silver Spring Transit Center and high-rise offices within the Silver Spring CBD. For Low Investment BRT the station would be located on Wayne Avenue just west of Fenton Street. This location is characterized by a mix of new commercial buildings and six-to-seven-story apartment complexes. On the north side of Wayne Avenue is a municipal Garage and a hotel. Mainly commercial and residential development extends to the south immediately adjacent to the Fenton Street Station on Wayne Avenue, where a 14-story condominium building is located next to the site of the future public library. Single family residential development extends to the east along Wayne Avenue

The station for Low and Medium Investment LRT and Medium Investment BRT Alternative would be located between Wayne Avenue and Bonifant Street just south of Fenton Street. The station would be incorporated into the building that will house the new Silver Spring Library. On the east side of Fenton Street is the First Baptist Church of Silver Spring.

**Dale Drive:** The Dale Drive Station, in Silver Spring, would be located on Wayne Avenue at Dale Drive. This area contains single family residential development to the west of Sligo Creek Park. Within ¼-mile of the proposed station are several schools including Sligo Creek Elementary School and Silver Spring International Middle School to the east. A supermarket with a 12-space parking lot is located nearby to the north of Schuyler Road.

**Manchester Road:** This station would be located along Wayne Avenue east of Manchester Road. The proposed station is surrounded on the east and west by residential development, including high-rise apartment buildings, garden apartments, and across Sligo Creek, single-family homes and the playing fields of Silver Spring International Middle School.

**Thayer Avenue:** The Silver Spring/Thayer Avenue design option includes a station on Thayer Avenue behind the East Silver Spring Elementary School. This area is residential, with single family homes and apartment buildings.

**Arliss Street:** This station would be located near the intersection of Arliss Street and Piney Branch Road. The area contains a mix of commercial buildings, with low-rise garden apartments located along Arliss Street and Piney Branch Road east of Arliss Street. The station is located directly on Arliss Street north of Piney Branch Road. There are a number of local retail and service uses in this vicinity, including two strip malls, and two gas stations. Some single-family homes are located on the west side of Flower Avenue and Piney Branch Road.

If the Silver Spring/Thayer Design option is selected the Arliss Street station would be on Piney Branch Road just west of Arliss Street.

**Gilbert Street:** This station would be located on University Boulevard at Gilbert Street. This area contains low-rise, generally auto-oriented commercial development, and residential uses including garden apartment complexes and single family homes. The station would abut New Hampshire Estates Park to the east, with a restaurant and grocery store just to the northeast. To the west are several single-family residences and a utility building with its associated parking lot on University Boulevard. Businesses located in the vicinity of Piney Branch Road and University Boulevard include a gas station, a strip mall and other smaller retail and service businesses. Casa de Maryland's Silver Spring Workers' Center, which offers employment placement and training programs, is located opposite Seek Lane.

**Takoma/Langley Transit Center:** This station will be part of a transit center being built by the MTA and Montgomery and Prince George's Counties to serve the many bus routes operating in the area. The transit center will provide a central station location for safer and more convenient transfers. Intense strip commercial development characterizes this area. To the southwest of the intersection is a strip mall set back behind surface parking and a small bank building. Another strip mall located to the northwest of the intersection includes various retail stores, and some office use on the upper floors of the complex. The future transit center will be on a portion of this shopping center. To the northeast are additional strip commercial uses and Langley Plaza shopping center. To the southeast is another strip mall in a predominantly one-story complex.

**Riggs Road:** This station is in a commercial use area with shopping centers and generally free-standing office and other commercial buildings surrounded by parking. This is a transition point between the strip commercial uses to the west and the park and residential areas to the east.

**Adelphi Road:** This area contains a mix of three-story garden apartment complexes, single-family houses, and University of Maryland buildings.



**Campus Center:** This station would be located on the University of Maryland campus, along Campus Drive in the vicinity of the Stamp Student Union, academic buildings, and libraries. For the Preinkert/Chapel Drive design option the station would be located on Preinkert Drive, at the location of the Preinkert Field House.

**East Campus:** This station would be located in an area that currently contains maintenance facilities associated with the University, but is planned for major mixed-use development in the near future. When completed, East Campus will have an estimated 2,000 housing units and 4,000 square feet of retail space, with additional commercial and hotel development. The station would be close to US 1 to provide good connectivity to bus routes operating on US 1.

**College Park Metro:** This station would be at the existing College Park Metro/MARC Station. The Metrorail Green Line, the MARC Camden Line, WMATA Metrobus, Prince George's County TheBus, and the UM Shuttle serve this station. The headquarters for the Food and Drug Administration's Center for Food Safety and Applied Nutrition are located on Paint Branch Parkway, across the street from the station. Major new development is planned or in construction in this area including a WMATA joint development project, and M Square, the University of Maryland research park. The historic College Park Airport is located nearby.

**River Road:** This station would be located to serve the heart of M Square. Currently this area includes a considerable amount of undeveloped land. The U.S. Department of Agriculture, Anacostia River Stream Park, and the Harvey W. Wiley Federal Building office complex are located nearby.

**Riverdale Park:** This station would be located at the intersection of East West Highway and Kenilworth Avenue and would be in the vicinity of strip commercial centers, and single-family and apartment type residences. This area is currently being considered for redevelopment. The MTA is coordinating Purple Line plans with local officials to support and compliment any redevelopment in the area.

**Riverdale Road:** This station would be near the intersection of Veterans Parkway and Riverdale Road. This area is adjacent to several large garden-style apartment complexes and some single-family residences.

**Annapolis Road:** This station would be near the intersection of Veterans Parkway and Annapolis Road. To the southwest of this station location is a four-story office building and a nearby strip commercial. There is a medical center present as well. Annapolis Road, beyond a group of several single-family houses, contains additional strip commercial development.

**New Carrollton Metro:** This station would be the eastern terminus of the Purple Line. To the east this area is surrounded by a large park-and-ride facility and office complexes. The Internal Revenue Service New Carrollton Federal Building is located to the west. The station is a major transportation hub served by the Metrorail Green Line, the MARC Penn Line, Amtrak's Northeast corridor and many local bus routes.

### ***3.1.4. Maintenance and Storage Facilities***

Two locations are being considered for maintenance and storage facilities for the Purple Line. The following is a brief description of the general surroundings of the two sites.

The Lyttonsville site is adjacent to the Lyttonsville station. The site is on the north side of the Georgetown Branch right-of-way, in an area that contains light industrial uses, including a storage and maintenance facility for Montgomery County's Ride On buses.

The Glenridge site is currently a maintenance facility for the Prince George's County Parks Department. The site is surrounded by parkland and Glenridge Elementary School.

## **3.2. Social Effects**

The proposed No Build, TSM, and Build Alternatives would impact people and the built environment (residences, businesses, neighborhoods, and community facilities), natural environment (visual aesthetics, air quality, noise/vibration, waterways, and trees), traffic, and travel options (private automobiles, transit, bicycling, and walking). These effects vary according to alternative, and location. This section presents the potential effects to the existing social environment in the corridor. Unless otherwise stated, this analysis was based on the Purple Line Limits of Disturbance drawings dated 12-31-07 through 2-15-08 for the alignments and 10-9-07 for the maintenance yards and shops. The effects to the following resources were analyzed:

- Residential Property Displacements and Acquisition
- Access
- Mobility
- Parking
- Neighborhood Cohesion
- Visual Effects
- Community Facilities
- Noise and Vibration

Within each resource discussion, alternatives are presented and evaluated based on their anticipated affect on the resource.

### ***3.2.1. Residential Property Displacements and Acquisitions***

"Displacements" are the complete taking of property to accommodate the project or its construction. Parcels where the majority of property or buildings are within the proposed right-of-way or that would substantially be affected by the right-of-way (i.e., inaccessible, close proximity to improvements) have been identified as displacements. "Acquisitions" are considered partial or "strip takes" of property needed to accommodate the Purple Line.



There would be no property impacts from the No Build and TSM Alternatives. All of the Build Alternatives would require some residential property acquisitions and a small number of displacements, see Table 3-6. Low Investment BRT would displace three single family homes. Medium Investment BRT would displace two single family houses, and several units from three buildings of two apartment complexes. Low and Medium Investment LRT would displace three single family homes, several units from three buildings of two apartment complexes, and one duplex. The High Investment BRT and LRT alternatives would displace ten single family houses, several units from three buildings of two apartment complexes, and one duplex. Under the Silver Spring/Thayer Avenue design nine single family houses and several units from three buildings of two apartment complexes would be displaced.

**Table 3-6: Property Displacements**

| Alternative                                                         | Property Displacements                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No Build                                                            | No displacements                                                                                                                                                                                                                                                                                       |
| TSM                                                                 | No displacements                                                                                                                                                                                                                                                                                       |
| Low Investment BRT                                                  | 1 single family home at Jones Bridge Road and Jones Mills Road<br>2 single family homes on Leonard Drive                                                                                                                                                                                               |
| Medium Investment BRT                                               | Units from the ends of 2 buildings of Falklands Apartments<br>2 single family homes on Leonard Drive<br>Units from end of 1 building of Barrington Apartments.                                                                                                                                         |
| Medium Investment BRT with Preinkert/ Chapel Design Option          | Same as Medium Investment BRT                                                                                                                                                                                                                                                                          |
| High Investment BRT                                                 | Units from the ends of 2 buildings of Falklands Apartments<br>2 single family homes on Leonard Drive<br>Units from end of 1 building of Barrington Apartments.<br>1 duplex on Plymouth Street and 1 house at Arliss Street and Flower Avenue<br>7 houses along MD 410 in the vicinity of Mustang Drive |
| High Investment BRT with Silver Spring/ Thayer Avenue Design Option | 2 single family homes on Leonard Drive<br>Units from the ends of 2 buildings of Falklands Apartments<br>Units from end of 1 building of Barrington Apartments.<br>7 houses along MD 410 in the vicinity of Mustang Drive                                                                               |
| Low Investment LRT                                                  | Units from the ends of 2 buildings of Falklands Apartments<br>2 single family homes on Leonard Drive<br>Units from end of 1 building of Barrington Apartments.<br>1 duplex on Plymouth Street and 1 house at Arliss Street and Flower Avenue                                                           |
| Medium Investment LRT                                               | Units from the ends of 2 buildings of Falklands Apartments<br>2 single family homes on Leonard Drive<br>Units from end of 1 building of Barrington Apartments<br>1 duplex on Plymouth Street and 1 house at Arliss Street and Flower Avenue                                                            |
| Medium Investment LRT with Preinkert/ Chapel Design Option          | Same as Medium Investment LRT                                                                                                                                                                                                                                                                          |



**Table 3-6: Property Displacements**

| Alternative                                                         | Property Displacements                                                     |
|---------------------------------------------------------------------|----------------------------------------------------------------------------|
| High Investment LRT                                                 | Units from the ends of 2 buildings of Falklands Apartments                 |
|                                                                     | 2 single family homes on Leonard Drive                                     |
|                                                                     | Units from end of 1 building of Barrington Apartments.                     |
|                                                                     | 1 duplex on Plymouth Street and 1 house at Arliss Street and Flower Avenue |
|                                                                     | 7 houses along MD 410 in the vicinity of Mustang Drive                     |
| High Investment LRT with Silver Spring/ Thayer Avenue Design Option | Units from the ends of 2 buildings of Falklands Apartments                 |
|                                                                     | 2 single family homes on Leonard Drive                                     |
|                                                                     | Units from end of 1 building of Barrington Apartments                      |
|                                                                     | 7 houses along MD 410 in the vicinity of Mustang Drive                     |

Specific locations and acreage of strip takes will be quantified in future stages of project development.

### **3.2.2. Access**

Access effects are assessed by determining where the alternatives would result in changes to the existing pattern of vehicular, pedestrian or bicycle traffic or the restriction of access at locations where access currently exists. These effects are indicated by the restriction of existing turning movements and changes in traffic patterns.

No changes in access are anticipated under the No Build and TSM alternatives. Substantial impacts to access are not anticipated by any of the Build alternatives considered, however there will be some changes as discussed below. High Investment BRT and LRT would reduce travel lanes on Wayne Avenue in Silver Spring. In Silver Spring under Medium Investment LRT a portion of Bonifant Street could be converted from two-way to one way. Where the transitway emerges from tunnels in existing roadways, access to properties could be restricted to right in/right out only. The tunnel portals on Wayne Avenue under High Investment BRT and LRT would convert Springvale Road and Cloverfield Road to right-in, right-out. Under High Investment BRT and all LRT alternatives the driveway for the town houses on Arliss Street would also become right-in, right-out only. The tunnel under Adelphi Road would convert Temple Street and Tulane Drive to right-in, right-out. There are two intersection overpasses for High Investment BRT and LRT on University Boulevard which would impact access from University Boulevard. The overpass at New Hampshire Avenue would convert Lebanon Street, Anne Street, and Edwards Place to right-in, right-out. The overpass at Riggs Rd would convert several business entrances to right-in, right-out.

Under the Silver Spring/Thayer design option the elevated section for the LRT alternatives creates similar restrictions at Piney Branch Road and Manchester Road.

A more detailed discussion is contained in the *Traffic Analysis Technical Report*, and access within specific neighborhoods is discussed in more detail in Appendix A, Neighborhood Characteristics.



### **3.2.3. Mobility**

Mobility effects are assessed through changes in transportation options, as well as changes in the efficiency of travel. These impacts can be indicated by the removal or reduction of travel lanes, transit, or pedestrian facilities. Mobility benefits include increased transportation options and increased efficiency of travel.

The only changes to the transportation system in the corridor under the No Build Alternative would be the construction of the Silver Spring Transit Center and the Takoma/Langley Park Transit Center. These two facilities would not add transit service, but would facilitate transfers between services. The mobility improvements provided by these two facilities would be present for all alternatives. Transit services at the Silver Spring Transit Center include Amtrak, Metrorail Red Line, MARC Brunswick Line, WMATA Metrobus, Montgomery County Ride On, and UM Shuttle. Transit services at the Takoma/Langley Park Transit Center include WMATA Metrobus, Montgomery County Ride On, Prince George's County TheBus, and UM Shuttle.

The TSM alternative would enhance mobility by providing a new Bethesda to New Carrollton bus service allowing for a one-seat ride along the Purple Line corridor, but the speed and reliability of the service would be limited by the traffic congestion on the roadways.

All of the Build Alternatives would enhance mobility with the placement of stations in or immediately adjacent to each neighborhood in the study area. Depending on the alternative, station locations within the same general area may vary slightly.

All of the Build Alternatives include the construction of the permanent Georgetown Branch Trail between Bethesda and Silver Spring. The only exception is that Low Investment BRT would not include the construction of the trail between Bethesda and Jones Mill Road.

All of the Build Alternatives would provide improved multi-modal transportation connectivity. This is particularly true where the Purple Line connects to the Metro, MARC, or Amtrak stations in Bethesda, Silver Spring, College Park, or New Carrollton. Most of the Purple Line stations are at or near bus stops to provide connectivity to those services.

### **3.2.4. Parking**

Parking effects are assessed by determining where the alternatives would result in permanent changes in public parking availability. These effects are indicated by changes to parking restrictions and the addition or loss of parking spaces.

Parking impacts discussed here are public parking, impacts to private parking are considered under property impacts. These public parking impacts include the introduction or expansion of peak hour parking restrictions, and elimination of on-street parking. There would be no impacts anticipated as a result of the No Build and TSM Alternatives, although increased traffic volumes in the future may result in the reduction or elimination of parking on the increasingly congested roadways.



### **Low Investment BRT**

The Low Investment BRT Alternative would require the expansion of parking restrictions during the morning and evening peak periods in both directions along Woodmont Avenue, between Old Georgetown Road and Wisconsin Avenue in Bethesda.

A short section of on-street parking would be restricted during peak travel periods along Jones Bridge Road near the intersection of Jones Mill Road. This segment would serve as a queue jump lane for eastbound buses.

On-street parking restrictions during peak travel periods would be expanded on Wayne Avenue in Silver Spring, between Cedar Street and Mansfield Road, to accommodate Low Investment BRT.

### **Medium Investment BRT**

On-street parking along the north curb line of Bonifant Street in Silver Spring would be removed to accommodate the Medium Investment BRT Alternative. Parking along the south curb could remain under Medium Investment BRT if Bonifant Street is converted to one-way usage.

On-street parking currently restricted during peak travel periods could be modified or expanded on Wayne Avenue in Silver Spring, between Cedar Street and Mansfield Road to accommodate Medium Investment BRT.

On-street parking along both the north and south sides of East West Highway in Riverdale Park, between 61<sup>st</sup> Place and 64<sup>th</sup> Avenue would be removed to accommodate the two dedicated transit curb lanes proposed for this segment.

### **High Investment BRT**

On-street parking along Wayne Avenue between Cedar Street and Mansfield Road in Silver Spring would need to be removed to accommodate High Investment BRT.

On-street parking along both the north and south sides of East West Highway, between 61<sup>st</sup> Place and 64<sup>th</sup> Avenue in Riverdale Park would need to be restricted during peak travel periods to accommodate the two new dedicated median transit lanes.

The Silver Spring/Thayer Avenue design option would require the removal of on-street parking in the block of Thayer Avenue west of Nolte Avenue. In the area of the proposed Thayer Avenue station, on-street parking would be permanently removed along both curbs. On-street parking would also be removed between Nolte Avenue and Dale Drive.

### **Low Investment LRT**

On-street parking along the north curb line of Bonifant Street in Silver Spring would be removed to accommodate Low Investment LRT. Parking along the south curb could remain under Medium Investment BRT if Bonifant Street is converted to one-way usage.



On-street parking currently restricted during peak travel periods could be modified or expanded on Wayne Avenue in Silver Spring, between Cedar Street and Mansfield Road to accommodate Medium Investment BRT.

Additionally, on-street parking along both the north and south sides of East West Highway, between 61<sup>st</sup> Place and 64<sup>th</sup> Avenue in Riverdale Park would be restricted during the peak travel periods to accommodate the two new dedicated median transit lanes.

### **Medium Investment LRT**

On-street parking along the north curb line of Bonifant Street in Silver Spring would be removed to accommodate Medium Investment LRT. Parking along the south curb could remain under Medium Investment BRT if Bonifant Street were converted to one-way usage.

On-street parking currently restricted during peak travel periods could be modified or expanded on Wayne Avenue in Silver Spring, between Cedar Street and Mansfield Road to accommodate Medium Investment BRT.

Additionally, on-street parking along both the north and south sides of East West Highway, between 61<sup>st</sup> Place and 64<sup>th</sup> Avenue in Riverdale Park would be restricted during peak travel periods to accommodate the two new dedicated median transit lanes.

### **High Investment LRT**

On-street parking along Wayne Avenue between Cedar Street and Mansfield Road in Silver Spring would be removed to accommodate High Investment LRT.

Additionally, on-street parking along both the north and south sides of East West Highway between 61<sup>st</sup> Place and 64<sup>th</sup> Avenue in Riverdale Park would be restricted during peak travel periods to accommodate the two new dedicated median transit lanes.

The parking restrictions described for the High Investment BRT Silver Spring/Thayer Avenue design option would be the same for High Investment LRT.

### ***3.2.5. Neighborhood Cohesion***

Neighborhood cohesion effects are assessed by determining potential disruption in the interaction among people and groups within a community, the use of community facilities and, residential stability. These impacts may occur because of a physical barrier, substantial change in land use, displacements, or other effects of a project.

The No Build and TSM alternatives would not affect neighborhood cohesion. Increasing traffic levels resulting from increases in population and economic development independent of the Purple Line project may adversely impact neighborhoods.

The only place the Purple Line would affect community cohesion is along the Georgetown Branch right-of-way where the currently unrestricted crossing of the trail would be restricted to specific locations. The rest of the alternatives considered are all on existing roadways or along

the CSX corridor and the introduction of the Purple Line would not affect the interactions among residents and their community facilities and services.

### ***3.2.6. Visual Effects***

Visual effects are assessed by determining where the options would result in the addition of new elements to or removal of existing features from the visual environment and where the options would substantially change the existing character of the neighborhood.

The corridor's existing visual character would generally remain as it is today for both the No Build and the TSM alternatives, subject to current development trends and increased traffic congestion. In some locations intersections could be widened to provide for queue jump lanes or to accommodate increased levels of traffic. Substantial impacts to neighborhood character and aesthetics are not anticipated under the No Build and TSM Alternatives.

The incorporation of the Purple Line on existing roads is considered compatible with the character of the roadways and communities along the alignment. Most of the roadways are arterials and already have a number of frequently operating bus routes on them. BRT on these roadways is therefore expected to result in little to no change in the visual character of the area.

The Build Alternatives, particularly the light rail alternatives, would present some type of character or aesthetic effects. Potential impacts would include loss of buffer trees and introduction of new visual elements near residences, recreational facilities, parklands, and trail systems. LRT and its required infrastructure (rails, wires, and traction power substations) would have a greater effect, but would still be suitable to the corridor.

The greatest visual effect of the Build Alternatives would be along the Georgetown Branch right-of-way. All of the Build Alternatives would use at least some portion of the right-of-way. The Low Investment BRT would use approximately one mile of the 3.3-mile right-of-way, while all the other Build Alternatives would use the entire 3.3 miles. The majority of the vegetation in the right-of-way would be cleared for the construction of any LRT or BRT alignment, and while new landscaping would be included in the construction, it would be of a different nature than that which currently exists. The clearing of vegetation for construction would reduce screening of transitway from neighboring land uses. This would cause a change in the visual character for the adjacent land uses and trail users.

The MTA has made a number of design modifications to minimize the effects in consideration of the visual sensitivity of this area. These modifications include moving the trail to the north side of the alignment between Pearl Street and just west of Jones Mill Road. Following the existing topography, which is higher on the north side, allows for a natural placement of the transitway three to four feet below the level of the trail, creating a more pleasant experience for the trail user and minimizing the required retaining walls. A goal of providing a 10-foot buffer of landscaping between the trail and the transitway has been added to further improve the experience of trail users. Where possible, the MTA is considering the use of grass tracks to maintain a more natural character for the right-of-way.



All of the Build Alternatives cross Rock Creek Park within the Georgetown Branch right-of-way. The Interim Georgetown Branch Trail currently crosses Rock Creek Park on a trestle bridge. The construction of the Purple Line in this area includes the replacement of this bridge for the transitway, and the construction of an adjacent, slightly lower, bridge for the trail. Due to the reduction in elevation, the new trail bridge would provide less dramatic views for trail users.

Twenty-five years ago freight trains used the Georgetown Branch right-of-way. Since then the right-of-way has been unused by freight trains. The construction of the Purple Line in this area would introduce the new visual elements of two new bridges and the periodic (as often as once every three minutes during peak periods) but brief passing of LRT or BRT vehicles. Rock Creek Park Trail users would be affected by the Purple Line in this area of high sensitivity.

The Purple Line would be on a new transitway along the back of Rosemary Hills Elementary School, single-family homes, garden apartments and, closer to downtown Silver Spring, high-rise apartment buildings. This transitway would lie between the CSX rail right-of-way and these properties. While the residential viewers and the school users would continue to see a transportation corridor, the Purple Line would be far closer, and at the same level as the buildings, having a substantial visual impact in that neighborhood.

The Purple Line would cross four other large linear parks on existing roadways, Sligo Creek Park, Long Branch Park, Northwest Branch Park, and Anacostia River Park. The roadways on which the Purple Line would operate as it crosses Long Branch, Northwest Branch, and Anacostia River Parks are all four lanes wide, heavily traveled, and are currently used by buses; so the addition of LRT or BRT in these areas would not represent a meaningful change in the viewshed. The crossing of Sligo Creek Park on Wayne Avenue would require widening of the existing bridge, which would be a visual effect.

If the Silver Spring/Thayer Avenue design option is selected, Thayer Avenue would undergo a considerable change in visual character as it is a narrow, quiet, residential street with a canopy of mature trees. Likewise, the aerial structure on a portion of Piney Branch Road required for the LRT for the same design option would result in substantial visual changes both for local residents and users of the Sligo Creek Trail.

Through the University of Maryland the Preinkert/Chapel Drive design option has substantial visual effects because the transitway would be on new right-of-way through areas that today are pedestrian and on roadways that are not currently heavily used.

In several locations aerial structures are proposed to cross busy streets. This would result in a visual effect. However, if a context-sensitive design is utilized, these crossings would not necessarily result in an adverse effect. The aerial structures in these areas would be designed in coordination with local stakeholders to develop concepts that complement the visual character of the area.

In general, the LRT Alternatives could result in visual effects because they would introduce new visual elements into areas with no existing similar elements. However, five of the communities

within the corridor (Bethesda, Chevy Chase, Takoma Park, College Park, and Riverdale Park) were served by streetcar lines as late as the 1950s and were developed, in part, because of the introduction of streetcars. One streetcar line ran along Wisconsin Avenue from the Chevy Chase / Bethesda area to Rockville. Another streetcar line extended along Connecticut Avenue and had its turnabout at Chevy Chase Lake, where the former B&O Railroad right-of-way crosses Connecticut Avenue immediately east of the Columbia County Club. Some trolley lines extended along Georgia Avenue and served Takoma Park, while others served College Park and Riverdale. The former presence of these trolley lines demonstrates that, in general, the presence of the LRT and its rails and wires would not be incompatible with the original character of many of these communities nor the modern arterial streets of today.

The Purple Line would include two maintenance and storage facilities. The Lyttonsville facility would be compatible with the surrounding light industrial uses, and the facility is currently being used by the Montgomery County Department of Public Works and Transportation as a maintenance depot and Ride On bus service maintenance and storage facility. The facility location on Veterans Parkway is currently the Glenridge Park maintenance facility, and it is surrounded by wooded areas and backs up to an elementary school. Because both sites are either in light industrial areas or are currently screened (and could continue to be screened in the future), substantial visual effects are not anticipated.

### ***3.2.7. Community Facilities***

Community facility effects are assessed by determining if there are property impacts or changes in access or parking that would affect community facilities. Community facilities are typically structures and/or spaces that provide a variety of services, including park and recreation areas, educational facilities, health care facilities, religious facilities, emergency services, public utilities, transportation facilities, post offices, town halls, and community and recreation centers.

There would be no impacts to community facilities from the No Build and TSM Alternatives. All of the Build Alternatives would provide improved access to community facilities because of the new and more efficient and reliable transit service. While all the Build Alternatives would provide service to the same facilities, because of the similarity of the routes, the quality of the service (speed and reliability) would be better as the level of investment increases. The Build Alternatives would have some impact on parking in a number of neighborhoods in the study area. Typical project impacts would include minor right-of-way acquisitions from schools, churches, parks, and recreational facilities.

### ***3.2.8. Noise and Vibration***

Noise effects are assessed by determining where increases in noise generated by the alternatives and stations would exceed FTA noise abatement criteria. This assessment of impacts considers general noise generated by transit vehicles including "wheel squeal," transit vehicle horns, and the cumulative noise exposure from station activity. Vibration effects are assessed by determining where vibration levels would exceed the FTA's vibration effect criteria. This assessment of impacts considers vibration generated by transit vehicles on the surface and in tunnels. Details regarding the noise and vibration analyses are presented in the *Noise and Vibration Technical Report*.



Noise and vibration impacts are not anticipated for the No Build or TSM Alternatives.

Moderate noise impacts are projected at three of the monitored locations under Low Investment BRT and at six locations under Medium and High Investment BRT. No noise impacts were projected for any of the LRT alternatives (see Table 3-7). Minimization and mitigation measures will be investigated should a build alternative be selected as the Locally Preferred Alternative.

No vibration impacts are projected for the BRT alternatives. The LRT alternatives are all projected to produce vibration impacts above the FTA threshold along the Georgetown Branch right-of-way at three locations along the Georgetown Branch right-of-way: adjacent to 4242 East-West Highway, adjacent to Edgevale Court, and at the eastern boundary of the Columbia Country Club.

Moderate noise impacts are anticipated at the Maintenance and Storage facility at Lyttonsville Place under the all the BRT alternatives and no impacts are anticipated at the Glenridge Maintenance and Storage. All the LRT alternatives are anticipated to have no impacts at the Lyttonsville facility and severe noise impacts at the Glenridge Maintenance and Storage facility. At this facility the dominate noise contribution is from wheel squeal generated from the curved tracks in the facility.

**Table 3-7: Sites with Projected Noise Impacts Generated From Line Operations**

| Site # | Description                                                         | Low Investment BRT | Medium Investment BRT | High Investment BRT | Low Investment LRT | Medium Investment LRT | High Investment LRT |
|--------|---------------------------------------------------------------------|--------------------|-----------------------|---------------------|--------------------|-----------------------|---------------------|
| N-17   | Leonard Drive                                                       | Moderate Impact    | Moderate Impact       | Moderate Impact     | No Impact          | No Impact             | No Impact           |
| N-19*  | 16 <sup>th</sup> Street between East-West Highway and Spring Street | N/A                | Moderate Impact       | Moderate Impact     | No Impact          | No Impact             | No Impact           |
| N-24   | Wayne Avenue between Cedar Street and Cloverfield Road              | Moderate Impact    | Moderate Impact       | Moderate Impact     | No Impact          | No Impact             | No Impact           |
| N-22   | Wayne Avenue between Dartmouth Avenue and Dale Drive                | No Impact          | Moderate Impact       | Moderate Impact     | No Impact          | No Impact             | No Impact           |
| N-25   | Wayne Avenue between Mansfield Road and Sligo Creek Parkway         | Moderate Impact    | Moderate Impact       | Moderate Impact     | No Impact          | No Impact             | No Impact           |
| N-30   | Arliss Street between Flower Avenue and Walden Road                 | No Impact          | Moderate Impact       | Moderate Impact     | No Impact          | No Impact             | No Impact           |

\* Existing noise levels (Ldn) were estimated from neighborhood population densities.

N/A = Not Applicable (alignment does not pass by this area)

Notes:

- Under the FTA criteria, for land uses not involving sleep (non-residential land use) peak hour, Leq (1hr) dBA was used for noise impact assessment purposes.
- LRT Headways of 15 minutes from 5:00 AM to 6:00 AM and 8:30 PM to 3:00 AM, 10 minutes from 6:00 AM to 6:30 AM, 9:00 AM to 3:30 PM and 6:30 PM to 8:30 PM, 6 minutes from 6:30 AM to 9:00 AM, and 3:30 PM to 6:30 PM were used for the operational LRT noise impact assessment. There is no service from 3:00 AM to 5:00 AM.
- BRT Headways of 15 minutes from midnight to 3:00 AM and 8:30 PM to 3:00 AM, 12 minutes from 10:00 AM to 3:00 PM, and 8:00 PM to midnight, 8 minutes from 9:00 AM to 10:00 AM, 6 minutes from 5:00 AM to 9:00 AM, and 3:00 PM to 8:00 PM were used for the operational BRT noise impact assessment. There is no service from 3:00 AM to 5:00 AM.





## 4. Land Use and Master Plans and Potential Effects

Existing land uses along the corridor include residential, commercial, recreational, institutional, and industrial development. Most communities in the corridor have plans, in part or in whole, that emphasize transit-oriented, mixed-use land uses in developed areas. The corridor includes established inner-ring communities that contain pockets of high-density development such as Bethesda, Silver Spring, Takoma Park/Langley Park, and New Carrollton. Most other portions of the corridor, with the exception of the University of Maryland in College Park, are characterized by low- to medium-density residential and commercial uses.

Land use in the eastern Montgomery County portion of the corridor is largely residential, with high concentrations of commercial development in Bethesda and Silver Spring. Residential areas in the corridor include a mix of housing types and densities. Land use along the remaining Prince George's County portion of the corridor, from Langley Park to New Carrollton, is primarily comprised of residential uses, but with large sections of recreational, institutional, and commercial areas. Housing types and densities in this area include a mix of multi-family low-rise apartment complexes and single-family dwellings.

The Maryland-National Capital Park and Planning Commission (M-NCPPC) is a bi-county agency empowered by the State of Maryland in 1927 to acquire, develop, maintain, and administer a regional system of parks within Montgomery and Prince George's Counties, and to prepare and administer a general plan for the physical development of the two counties. Development projects in Montgomery and Prince George's Counties require approval from M-NCPPC.

### Existing Land Use

The 1964 Plan by the M-NCPPC, *...On Wedges and Corridors, a General Plan for the Maryland-Washington Regional District*, was developed as a bi-county general plan for Montgomery and Prince George's Counties. The name for the Plan comes from the regional land use pattern it recommends. In the Plan, the Corridors radiated out from Washington, D.C. like spokes of a wheel and were to be separated by the Wedges (low-density agricultural and large-lot residential areas). The Wedges and Corridors concept has shaped the counties by channeling growth into the development corridors and an urban ring around Washington, D.C. At the same time, wedges of open space, farmland, and lower density residential uses have been preserved.

Both counties have General Plans that provide the conceptual structure for overall land use, and each county has more detailed master plans and sector plans for specific planning areas. The neighborhoods within the study area are governed by the following community master plans:

- Comprehensive Amendment to the Bethesda/Chevy Chase Master Plan (1990)
- Comprehensive Amendment to the Bethesda Central Business District Sector Plan (1994)
- Woodmont Triangle Amendment to the Sector Plan for the Bethesda CBD (2006)



- North and West Silver Spring Master Plan (2000)
- Silver Spring Central Business District and Vicinity Sector Plan (2001)
- East Silver Spring Master Plan (2000)
- Strategic Framework for Transit-Oriented Development in Prince George's County (2003)
- Takoma Park Master Plan (2000)
- Planning for the University Boulevard Corridor (2003)
- Approved College Park US 1 Corridor Sector Plan and Sectional Map Amendment (2002)
- University of Maryland Campus Master Plan (2000)
- New Carrollton Transit-Oriented Development Strategy Planning Study (2004)
- Annapolis Road Corridor Planning Study (2004)
- Approved Master Plan and Sectional Map Amendment for Planning Area 68 (1994)
- Bladensburg-New Carrollton and Vicinity – Approved Master Plan and Sectional Map Amendment for Planning Area 69 (1994)
- Approved Transit District Development Plan for the College Park-Riverdale Transit District Overlay Zone (1997)

### **Montgomery County**

The *Approved and Adopted General Plan Refinement of the Goals and Objectives for Montgomery County* (1993) indicates that the critical need for commuting between the development corridors within the region does not justify deviating from the Wedges and Corridors pattern. In the plan, the need for improvements in east-west travel is acknowledged but not with an intent to create an east-west development corridor(s). It is intended that better east-west transportation links be created, but they will traverse areas not planned and not intended for intensive development.

The land use goal in the General Plan espouses consistency with the Wedges and Corridors pattern promoting a wide variety of land use and development densities.

Below is a description of existing land use by the six study area segments. Within each study area segment, the neighborhoods within each study segment are described. The land uses are described at both the proposed station areas and along the proposed transit corridor alignment. In addition, current area master plans are reviewed. Figure 4-1 depicts existing land use within the study area.

Land use in the eastern Montgomery County portion of the corridor is largely residential, with high concentrations of commercial development in Bethesda and Silver Spring. The residential areas in the corridor include a mix of housing types and densities.

**Bethesda/Chevy Chase.** The Bethesda CBD is a regional employment center that is characterized by high-density mixed uses. As home of the National Institutes of Health, National Library of Medicine, and National Naval Medical Center, Bethesda is one of the world's leading biomedical research centers. Bethesda draws employees and shoppers from a wide area, with relatively low office vacancy rates (6 percent average vacancy rate).<sup>1</sup> The State of Maryland designated downtown Bethesda as an Arts and Entertainment District in 2002 because of the presence of almost 200 restaurants, more than 100 specialty shops, numerous art galleries, and the Discovery Trail, which highlights public art in the Bethesda CBD. The Bethesda CBD also has a large residential population in high-rise apartment buildings. Single-family and some multi-family residences with little commercial development predominate in the corridor east of the Bethesda CBD. Chevy Chase, a largely residential community, experienced considerable growth in the 1980s and 1990s. Adjacent to the east is Lyttonsville, which contains commercial and industrial uses, including Montgomery County Department of Public Works facilities in the vicinity of Brookville Road and the CSX/Amtrak/MARC alignment. East of Rock Creek to the CSX alignment in Silver Spring, land uses adjacent to the corridor are more varied, ranging from commercial/industrial development to low, medium, and high-density residences.

The *Comprehensive Amendment to the Bethesda/Chevy Chase Master Plan* (1990) describes the Bethesda-Chevy Chase area from I-495 to the north, the District of Columbia to the south, Rock Creek to the east, and the Potomac River to the west. It excludes the three Sector Plan areas of the Bethesda Business District, Friendship Heights, and Westbard. The Bethesda-Chevy Chase area can be characterized as a mature suburban community comprised of predominantly single-family residential areas with a limited number of clearly defined, high-density employment and neighborhood retail areas. There is a major federal presence, both in health and defense employment, as well as federal park areas. Numerous other large land users include country clubs, private schools, and institutional uses. The Plan recognizes that the land use outside the major employment centers is predominantly non-commercial. Some commercial and higher density housing is concentrated at several locations throughout the area. Bethesda-Chevy Chase is a mature suburban community that continues to be one of the growth centers for Montgomery County.

The Chevy Chase area (Eastern and Southern Bethesda-Chevy Chase) is bounded on the north by I-495 (the Beltway), on the east by Rock Creek Park, and on the south by Washington, D.C. The western boundary includes the Naval Medical Center, the Bethesda Business District, Little Falls Branch Parkway, and Massachusetts Avenue. The mixing of commercial and higher density residential uses occurs in the business districts and in Chevy Chase Lake. Several large land users and institutions are within the area. The remaining land usage is predominantly single-family detached housing.

The Mid-Bethesda area (Northern Bethesda-Chevy Chase) is bounded on the north and west by the Beltway, on the south by River Road, and on the east by Little Falls Parkway, the Bethesda CBD, and Jones Bridge Road, and includes the Uniformed Services University of the Health Sciences. Mid-Bethesda is a mature, stable area predominantly zoned residentially and

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<sup>1</sup> OfficeFinder, LLC, 2007, see website at <http://www.bethesda-office-space.com/>.



characterized by single-family detached houses. The area is largely built out and there is little potential for redevelopment. There are several major Federal properties, including the Uniformed Services University, the Naval Medical Command, and the National Institutes of Health.

The *Comprehensive Amendment to the Bethesda Central Business District Sector Plan* (1994) reflects the goals in the “Bethesda-Chevy Chase Master Plan.” The Sector Plan also directly supports the Wedges and Corridors concept by directing higher-density development to the Urban Ring in a transit serviceable area. A mix of uses is planned throughout the Plan area, while ensuring suitable transitions to adjacent residential communities. The center of the sector plan area includes an area of about 405 acres within the Bethesda-Chevy Chase Planning Area, and occurs at the intersection of three Maryland state highways: Wisconsin Avenue, East West Highway, and Old Georgetown Road. The land area covered by the Bethesda CBD Sector Plan is within the boundaries of the “Urban Ring.” The Bethesda CBD Sector Plan area contains a mix of land uses in a suburban downtown environment. Highest densities are concentrated in the Metro Core District. High-density buildings are also found along East West Highway and north along Wisconsin Avenue into the Woodmont Triangle District. Retail exists on the first floor of most commercial structures. Housing is distributed throughout the area.

The *Woodmont Triangle Amendment to the Sector Plan for the Bethesda CBD* (2006) is intended to provide additional opportunities to help realize the “housing and neighborhoods” objective of the existing sector plan for the Bethesda CBD with a focus on the Woodmont Triangle District. The Woodmont Triangle District is bounded on the north by the National Institutes of Health, on the east by Wisconsin Avenue, on the south by Woodmont Avenue, and on the west by Old Georgetown Road. The Metro Core District is directly to the south. The multi-family housing located along Battery Lane and adjacent to the National Institutes of Health is included in the Woodmont Triangle Study Area. Portions of the properties along the west side of Wisconsin Avenue and along the east side of Old Georgetown Road are also included. The Woodmont Triangle District consists of retail, restaurants, offices, high-rise residential buildings, single-family houses, and arts-related uses.

**Silver Spring.** Silver Spring contains a dense commercial core with high-rise office buildings and new development. These land uses become more intensive closer to the Silver Spring Transit Center. Along the CSX Metropolitan Branch main line, land uses are primarily residential with a wide range of densities. Silver Spring contains a dense commercial core with high-rise office buildings. Office and commercial land uses become more intensive closer to the Silver Spring Transit Center. The Silver Spring CBD, which contains primarily office and commercial development, serves as a downtown for the residential neighborhoods of Silver Spring and Takoma Park. Silver Spring has experienced rapid growth in recent years, with approximately 1.8 million square feet of commercial development constructed between 2000 and 2006. The eastern Silver Spring, Long Branch, and Takoma Park communities are characterized by established residential neighborhoods that are compactly developed, containing a mix of single-family and multi-family dwellings. The Flower Avenue/Piney Branch Road area in Long Branch is a small commercial area targeted for economic redevelopment and enhanced access for

transit. The City of Takoma Park contains clusters of older commercial development, stream valleys and mature trees, historic houses, two colleges, and hospital facilities.

The *North and West Silver Spring Master Plan* (2000) describes issues specific to North and West Silver Spring. The North Silver Spring area is generally bounded on the north by the Capital Beltway; on the east by Sligo Creek Park; on the south by Wayne Avenue, Bonifant, Cedar, and Spring Streets, the CSX Railroad tracks, and the southern property line of the Walter Reed Army Medical Center; and on the west by Rock Creek Park. West Silver Spring is bounded on the north by the CSX Railroad tracks and the southern property line of the Walter Reed Army Medical Center; on the east by 16<sup>th</sup> Street; on the south by the Washington, D.C. boundary; and on the west by Rock Creek Park. North and West Silver Spring are part of the County's Urban Ring and are characterized by established residential neighborhoods that are compactly developed and well maintained.

North Silver Spring covers approximately 940 acres. North Silver Spring's residential neighborhoods contain predominantly single-family detached houses. A limited number of townhouses and apartments are around the Silver Spring CBD and along major highways. West Silver Spring covers approximately 445 acres. West Silver Spring's residential neighborhoods include both single-family houses and high-rise apartments.

The *Silver Spring Central Business District and Vicinity Sector Plan* (2001) describes issues specific to Silver Spring's CBD. The 265-acre CBD is inside the Capital Beltway in the southeast corner of Montgomery County, sharing a boundary with Washington, D.C., along Eastern Avenue. The CBD is roughly bounded by Spring and Cedar Streets on the north, Fenton Street on the east, Eastern Avenue on the southwest, and 16<sup>th</sup> Street on the west. Four revitalization areas within the Silver Spring CBD are the core of the CBD, the Ripley District, South Silver Spring, and Fenton Village. The core of the CBD is centered on the intersection of Georgia Avenue and Colesville Road and includes the traditional retail center of Silver Spring. The Core includes transportation, commercial, retail, and high-rise apartment buildings. The Ripley District, a triangular area just south of the Silver Spring Metrorail Station between Bonifant Street, Georgia Avenue, and the CSX Railroad tracks, is centrally located in downtown Silver Spring. The district is dominated by automotive shops, public and private parking lots and garages, and small warehouse facilities. South Silver Spring is located on the southwest edge of the CBD, abutting the District line, north of the intersection of Georgia and Eastern Avenues. This area is characterized by a variety of commercial uses. Fenton Village is located south of Wayne Avenue and the core of the CBD, between Georgia Avenue on the west and the CBD boundary on the east. This area is a mix of retail, office, and auto-related uses; the east side of Fenton Street is adjacent to a single-family residential neighborhood.

The *East Silver Spring Master Plan* (2000) describes the East Silver Spring area. East Silver Spring is almost totally built out, with an established character and development density and little vacant land. East Silver Spring contains single-family detached neighborhoods, areas that include a mix of single-family and apartment dwellings, and areas that consist of multi-family apartments. East Silver Spring's commercial areas are primarily small neighborhood shopping centers.





### **Prince George's County**

In *Prince George's County Approved General Plan* (2002), the overall concept is based on the "On Wedges and Corridors" concept. The General Plan uses a system of designated Centers, Corridors, and growth Tiers to guide future land use and development in Prince George's County. The Plan proposes three development tiers (Developed, Developing, and Rural Tiers); the study area within Prince George's County lies within the Developed Tier. The Developed Tier is an 86-square-mile area along the border of Washington, D.C. and more or less within or just outside the Capital Beltway.

Within the Tiers, an overlay designation of Centers and Corridors is established. The Plan designates more than two dozen centers, which are focal points for increased efforts to concentrate development that can take advantage of existing or future investments in high-capacity mass transit services. Many of the designated Centers are located at Metrorail or MARC stations or at bus service hubs. The plan also designates seven corridors where more intensive development and redevelopment should be encouraged.

The General Plan recommends a balance of housing choice, including single-family housing on suburban lots and housing close to transit stops. The Developed Tier contains most of the transit system capacity in the county. The vision for the Developed Tier is a network of sustainable, transit-supporting, mixed-use, pedestrian-oriented, medium- to high-density neighborhoods. High-quality housing and economic development in Centers and Corridors are also encouraged. Overall, the General Plan promotes new development, including more mixed-use development, in designated Centers and Corridors within the Developed Tier.

In the *Strategic Framework for Transit-Oriented Development in Prince George's County* (2003), transit-oriented development seeks to achieve the goals of the General Plan by promoting the development of mixed residential and nonresidential uses at moderate-to-high densities in context with surrounding neighborhoods and with a strong emphasis on transit-oriented design.

The New Carrollton Metrorail Station is located along Ellin Road at the intersection of John Hanson Highway (US 50) and I-95. The station is also a MARC commuter rail and an AMTRAK intercity rail station. The surrounding land uses within one-half mile of the site are major office employment, industrial, warehouse, flex space, and residential development. The planned land uses for the New Carrollton Metrorail Station are commercial, office, and business park. The College Park Metrorail Station is at the southeast quadrant of the intersection of Paint Brush Parkway and the CSX railroad tracks. Land uses within one-half mile of this station include office, research, and industrial employment. The planned land uses for the College Park Metrorail Station are mixed-use office, retail, hotel, and light industrial and recreation. The General Plan places both stations in the Developed Tier and classifies them as Metropolitan Centers.



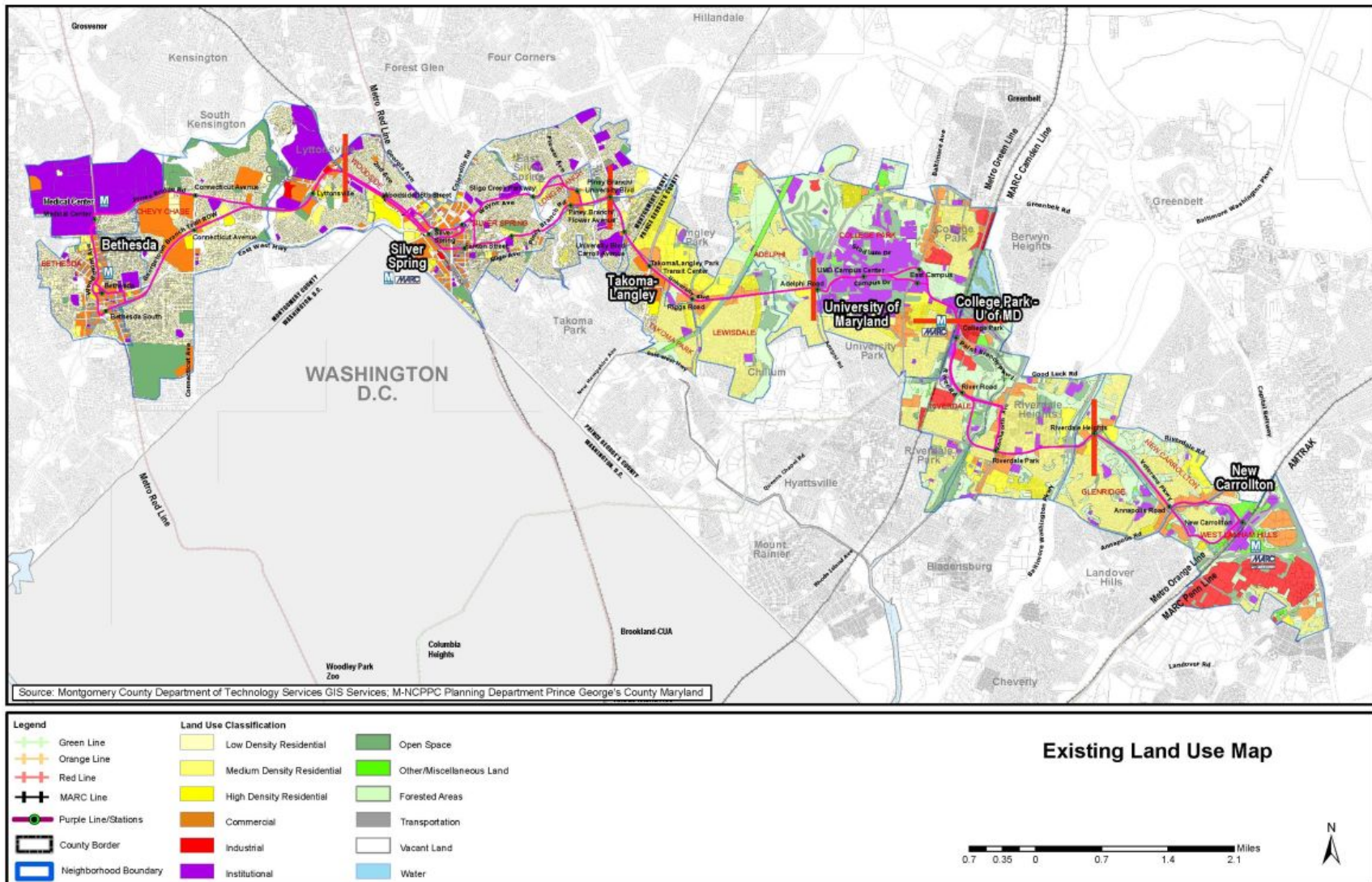


FIGURE 4-1: EXISTING LAND USE



Land use along the Prince George's County portion of the corridor, from Langley Park to New Carrollton, is primarily comprised of residential uses, but with large sections of recreational, institutional, and commercial areas, as shown on Figure 4-1.

**University Boulevard.** Langley Park is characterized by relatively high-density development, including multi-family residential units and older auto-oriented commercial uses. Takoma Park and Langley Park are the only major sections of the proposed transit corridor that are not served by commuter rail lines. A focal point of the Langley Park community is the Takoma/Langley Crossroads at the intersection of University Boulevard and New Hampshire Avenue. The crossroads area contains older shopping centers at each of the four corners surrounded by multi-family housing. This area, known as Maryland's International Corridor and centered along University Boulevard, is a major shopping and entertainment center. The University Boulevard section of the Purple Line alignment contains mixed-use development interspersed with single-family houses, garden apartments, and retail and service-related uses. This wide boulevard has sidewalks and is served by surface transit, although the nonresidential development that is present is generally auto-oriented and characterized by strip commercial uses.

The *Takoma Park Master Plan* (2000) includes the City of Takoma Park in the southeastern corner of Montgomery County, adjacent to Prince George's County and Washington, D.C. Takoma Park has established residential neighborhoods with historic character. Takoma/Langley Crossroads is located south of University Boulevard at New Hampshire Avenue in the City of Takoma Park.

The master plan, *Planning for the University Boulevard Corridor* (2003), describes the area bounded by I-495, Northwest Branch Stream Valley Park, the Prince George's County boundary, Sligo Creek Stream Valley Park, and extending to Franklin Avenue and Colesville Road. The study area includes portions of the Takoma Park and East Silver Spring Master Plan areas located along University Boulevard and Piney Branch Road in Montgomery County. The area consists of residential neighborhoods with commercial areas along University Boulevard.

**University of Maryland/College Park.** The campus of the University of Maryland contains approximately 11 million square feet of floor area in 262 buildings, covering approximately 1,000 acres.

The *Approved College Park US 1 Corridor Sector Plan and Sectional Map Amendment* (2002) includes the City of College Park, except for one parcel. The sector plan area encompasses 442 acres and extends nearly three miles along US 1 (Baltimore Avenue) from the Capital Beltway to the north to the vicinity of Guilford Drive to the south. Of the 442 acres, 280 acres are developed including 132 acres of commercial uses; 62 acres of residential uses; 8 acres of public/quasi-public uses; and 78 acres owned by the University of Maryland.

US 1 forms the spine of the corridor and is bordered on both sides by nearly continuous commercial development. This commercial corridor provides the main access to the University of Maryland and various destinations within the City of College Park. US 1 is bounded on the east by residential neighborhoods and on the west by the University of Maryland, the Paint

Branch Stream Valley Park, and residential areas. The purpose of the sector plan is to transform the US 1 corridor from an older highway commercial strip to a revitalized gateway boulevard and town center. As the City of College Park is a Priority Funding Area (PFA), it is a location where state and local governments encourage and support economic development and new growth. The Maryland Department of Planning has developed the Compact Mixed-Use Overlay Zone, a model code for potential adaptation and local use in identifying priority funding areas, such as the City of College Park. The zone requires a range of residential dwelling types in a vertical and horizontal mix of supportive commercial uses. This sector plan encourages residential and mixed-use infill development along US 1 in both vertical and compact building forms for the purpose of concentrating development. In addition, the College Park US 1 Corridor is recognized as part of the Developed Tier.

The *University of Maryland Campus Master Plan* (2000) describes the University of Maryland campus, which consists of about 11 million gross square feet in 262 buildings on approximately 1,000 acres. With the inclusion of off-campus facilities, the building inventory totals nearly 12 million gross square feet in 459 buildings on approximately 4,000 acres. The Campus Master Plan establishes a framework for the university's development from 2000 to 2020. The Plan recommends four principles to guide development. The first principle supports planning the campus in such a way that protects the beauty of the campus and the natural environment; the second seeks to reduce the number of cars on campus, eliminate vehicular congestion, and improve circulation throughout campus; the third seeks to maintain a good relationship with the community by developing outlying sites with attention to how they can connect with the larger community; and the final principle highlights the importance of preserving the architectural heritage of the campus and creating additional open space. The primary concerns of the university are its old, deteriorating buildings and infrastructure, and the need for more programmable space.

**Riverdale Park.** The Riverdale Park section of the Purple Line alignment primarily contains lower density residential areas, with auto-oriented commercial development along Kenilworth Avenue and Riverdale Road.

The *Approved Master Plan and Sectional Map Amendment for Planning Area 68* (1994) includes eight municipalities in an area generally bounded by Adelphi Road/Albion Road, the District of Columbia border, Kenilworth Avenue, and the Northwest Branch Stream. Most of the planning area is residential with approximately half of the residential units being detached single-family homes. The master plan area includes two Transit District Overlay Zones (TDOZ) which are mapped zones superimposed over other land use zones in a designated area around a Metro station. The purposes of these two transit zones, the West Hyattsville TDOZ and the Prince George's Plaza TDOZ, are to increase the use of transit facilities, maximize the return on investment in a transit system, and encourage appropriate development near transit stations with coordinated urban design elements.

The *Approved Transit District Development Plan for the College Park-Riverdale Transit District Overlay Zone* (1997) describes the College Park-Riverdale Transit District, an area generally bounded by the College Park Airport, Tuckerman Street, Anacostia River Park, and the CSX and



Metro railroad lines. The College Park-Riverdale Transit District comprises approximately 293 acres east of the College Park-University of Maryland Metro Station. The northern portion of the transit district is located within the City of College Park and the southern portion is within the Town of Riverdale. Three basic patterns of land use are evident within the transit district. The area north of Paint Branch Parkway contains light industrial and warehouse uses, recreational uses, a cultural use, and a commercial use. The central portion of the area south of Paint Branch Parkway includes research and development uses, recreational uses with associated parking, the Metro station and surface parking, undeveloped, industrially zoned land, and open space. The southern portion contains office buildings, warehouses, undeveloped, industrially zoned land and open space uses.

**New Carrollton.** The New Carrollton section of the Purple Line alignment contains a limited number of businesses along Annapolis Road and a major government employment center near the New Carrollton Amtrak/MARC/Metro Station. The Internal Revenue Service New Carrollton Federal Building, at 5000 Ellin Road, is just north of a compact residential neighborhood and just south of major retail uses, including the Defense Shopping Center, the Plaza 30 Shopping Center, and the New Carrollton Mall and New Carrollton Shopping Center. High-density office use is located to the north in the CSC Maryland Technology Center. Annapolis Road is a major retail corridor lined with strip commercial development, as well as shopping centers at the intersections of Annapolis Road and Veterans Parkway and Riverdale Road.

*The Bladensburg-New Carrollton and Vicinity – Approved Master Plan and Sectional Map Amendment for Planning Area 69 (1994)* includes a 10.6 square mile area bounded by Good Luck Road, John Hanson Highway, the Capital Beltway, and Anacostia River/Kenilworth Avenue. Of the 10.6 square mile area, approximately 56 percent is residential, five percent is commercial, six percent is industrial, nine percent is public/quasi-public, seven percent is parkland, less than one percent is water, and the remainder is rights-of way.

The purpose of the *New Carrollton Transit-Oriented Development Strategy Planning Study* (2004) is an assessment of the planning and policy options for attracting transit-oriented development to the New Carrollton station area. The station area is designated as a Metropolitan Center in the Developed Tier and includes an estimated 135.9 acres of undeveloped or underdeveloped land within one-half mile of the New Carrollton station. The properties are currently a mix of public and private ownership and include 35.7 acres of WMATA-owned property and 10.3 acres of state-owned land. The neighborhood to the north of the rail lines contains several communities with both multifamily and single-family residential housing. The “triangle” to the southeast, bordered by the rail lines, US 50 and the Capital Beltway, is a suburban office park with a substantial amount of surface parking.

In the *Annapolis Road Corridor Planning Study* (2004), Annapolis Road is one of seven corridors recommended for more intensive development and redevelopment. Sections of the corridor are included within the City of New Carrollton and the Town of Landover Hills. The New Carrollton Metro Station is approximately one-half mile from Annapolis Road. The section



of the Annapolis Road corridor between the Baltimore-Washington Parkway and the Capital Beltway is a state-designated Smart Growth area.

### **Future Land Use**

This discussion on future land use presents approved projects and developments obtained from the Montgomery and Prince George's County planning offices and interviews with local planners.

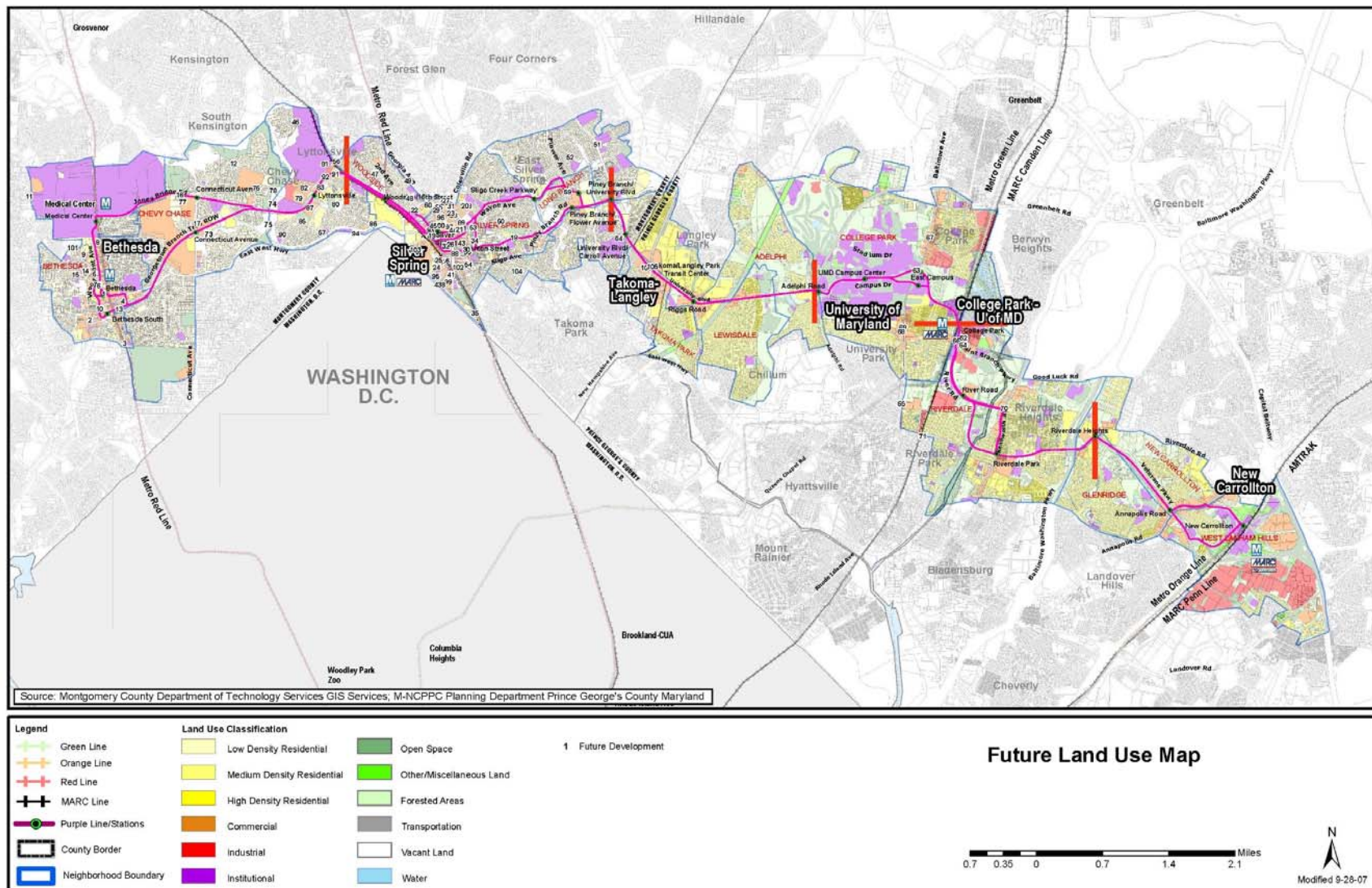
The Master Plans of Montgomery and Prince George's Counties are consistent with the 1964 M-NCPCC General Plan. The following is a description of future land use as envisioned in the Master Plan documents for the planning areas.

#### **Montgomery County**

**Bethesda/Chevy Chase.** In the future, the Bethesda-Chevy Chase Master Plan recommends that, in general, existing land uses for the Chevy Chase area be maintained and enhanced. Existing single-family residential land use and zoning (R-60, R-90, and R-200) is reconfirmed for the major portion of the Bethesda-Chevy Chase planning area, and single-family attached (townhouse) residential use is recommended for some larger sites in the planning area. The master plan supports the current uses of large land users, but endorses housing as the primary alternative use if they are ever redeveloped.

The transportation plan in the Master Plan recommends increasing uses of transit services and somewhat limiting the construction of new highways to maintain the quality of life in the planning area. The transportation plan recommends improved transit access to the Bethesda and Silver Spring CBDs and Metro via the Georgetown Branch right-of-way. The 4.4-mile portion of the Georgetown Branch right-of-way is designated for light rail use between Silver Spring and Bethesda by the *Georgetown Branch Master Plan Amendment* (1990). The use of this existing travel corridor would link the two major business districts and the two arms of the Metro Red Line. The Purple Line would pass through this master plan area west of Rock Creek except for the low BRT alternative.

The Bethesda CBD Sector Plan seeks to direct higher density development to the Urban Ring, which is the more intensively developed area of Montgomery County nearest Washington, in a transit serviceable area. A mix of uses is planned through the planning area, while ensuring suitable transitions to adjacent residential communities. The Plan recommends rezoning some properties to Transferable Development Rights zones in support of the agricultural wedge. A large increase in housing is provided, in balance with increased employment. The Plan would also concentrate development near transit, provide for transferred development from rural areas, and support large-scale employment development. The major land use objectives are continuing employment growth; encouraging housing in combination with office and retail uses; and supporting the development of a cultural center. The Metro Core District is the center of downtown Bethesda; this district extends from Cheltenham Drive to the north, Bethesda Avenue to the south, Woodmont Avenue to the west, and Pearl Street to the east. The specific land use recommendations for the Metro Core District emphasize employment land uses, but include potential for some additional residential uses. The plan recommends that future development in



**FIGURE 4-2: FUTURE LAND USE**



the Fenton District remain sensitive to the transition between the commercial district and the adjacent single-family neighborhood. The Purple Line would pass through this sector plan area at Bethesda's CBD.

The Bethesda CBD Sector Plan seeks to direct higher density development to the Urban Ring, which is the more intensively developed area of Montgomery County nearest Washington, in a transit serviceable area. A mix of uses is planned through the planning area, while ensuring suitable transitions to adjacent residential communities. The Plan recommends rezoning some properties to Transferable Development Rights zones in support of the agricultural wedge. A large increase in housing is provided, in balance with increased employment. The Plan would also concentrate development near transit, provide for transferred development from rural areas, and support large-scale employment development. The major land use objectives are continuing employment growth; encouraging housing in combination with office and retail uses; and supporting the development of a cultural center. The Metro Core District is the center of downtown Bethesda; this district extends from Cheltenham Drive to the north, Bethesda Avenue to the south, Woodmont Avenue to the west, and Pearl Street to the east. The specific land use recommendations for the Metro Core District emphasize employment land uses, but include potential for some additional residential uses. The plan recommends that future development in the Fenton District remain sensitive to the transition between the commercial district and the adjacent single-family neighborhood. The Purple Line would pass through this sector plan area at Bethesda's CBD.

The Woodmont Triangle District is a commercial area, containing both retail and office uses; this district is located roughly between Old Georgetown Road to the west and Wisconsin Avenue to the east, and south of Battery Lane. The vision of the Woodmont Triangle Amendment to the Sector Plan for the Bethesda CBD is for a vibrant, urban neighborhood with an emphasis on residential, retail, and arts uses. The Plan recommends capitalizing on the mix of uses in the study area and its advantageous location between two Metro stations to support its development as a transit-oriented urban neighborhood. The amendment supports mixed-use development, including retail and affordable housing, and designating the Woodmont Triangle District as a housing resource area. The amendment also supports mechanisms for encouraging restaurants, retail shops, space for the arts, and improvements to the pedestrian environment to spur revitalization and renovation of the Woodmont Triangle. It recommends street-oriented retail, restaurants, and other street-animating uses on the first floors of buildings located along streets such as Norfolk and Cordell Avenues. The Low Investment BRT alternative would pass through this sector plan on Woodmont Avenue between Old Georgetown Road and just north of Rugby Avenue.

**Silver Spring.** Within Silver Spring, nearly one million square feet of commercial development is currently planned or in the pipeline. Major new projects in the Silver Spring CBD include new retail, restaurants, entertainment, office, hotel, and residential developments, with a strong focus on transit-oriented development.

The intent of the North and West Silver Spring Master Plan is to preserve the existing residential character. The plan generally reaffirms the existing land use pattern throughout the area. Within





North Silver Spring, the main issue is preserving the residential character of the neighborhoods, especially the edges along major highways and adjacent to the CBD, and ensuring that new development is compatible with the existing residential character. The existing land use pattern should remain essentially the same. Within West Silver Spring, the plan seeks to preserve the residential character. Like North Silver Spring, West Silver Spring is almost completely built out, with a very limited amount of vacant land. The few parcels that are vacant are recommended for residential development.

The Silver Spring CBD Sector Plan seeks to focus new development around the connected transportation systems (including Metrorail, MARC, and bus stations) in the core of the CBD and around the Transit Center. A mix of uses continues to be recommended for the core. The plan also seeks to adjust zoning to encourage redevelopment throughout the CBD. The Plan's land use recommendations focus the densest development in the Core and around the Transit Center, and provide a diversity of retail, residential, office, hotel, civic, and park uses. In the Ripley District, future development should take advantage of the area's excellent location and development potential. In Silver Spring, development should be encouraged while protecting surrounding residential neighborhoods. It is recommended that future growth in Fenton Village take advantage of land use options while remaining sensitive to the transition between the commercial district and the adjacent single-family neighborhood.

The East Silver Spring Master Plan seeks to preserve and enhance the existing residential character of East Silver Spring's neighborhoods and improve neighborhood commercial centers. New development should be compatible with the existing residential character. The revitalization of commercial centers in East Silver Spring and along University Boulevard is supported.

### **Prince George's County**

**University Boulevard.** According to the *Takoma Park Master Plan*, the vision for Takoma/Langley Crossroads is to serve as a major community commercial center and transit terminal. The Master Plan favors preservation of the neighborhood and encourages community-oriented retail, with a focus on transit connections. The Master Plan discusses the Purple Line transit route and a possible stop near New Hampshire Avenue needing review to address increased development potential and possible land use impacts.

The master plan for the University Boulevard Corridor recommends preserving the residential character of the neighborhoods near commercial areas along University Boulevard by confirming residential zoning.

It should be noted that a Bi-County Sector Plan for the Takoma Langley area is currently under development by a joint Montgomery County and Prince George's County task force.

**University of Maryland/College Park.** The University of Maryland and College Park sections of the Purple Line alignment are areas where major employment and institutional growth are anticipated in the future. This section of the corridor passes through the City of College Park, including station areas with planned development sites such as the College Park-University of

Maryland Metro Station. With its location adjacent to the University of Maryland and as one of the remaining areas within the beltway containing substantial amounts of land for development and redevelopment, College Park is expected to experience major growth of office, retail, residential, and student housing development over the next 20 years. Three major projects are the East Campus Redevelopment Initiative on US 1 south of Paint Branch Parkway (2,000 dwelling units and 500,000 square feet of commercial development), the proposed joint development planned for the College Park-University of Maryland Metro Station (mixed commercial and residential uses), and M-Square, a collection of parcels that are being developed as the University's research and development campus on River Road.

In the *Approved College Park US 1 Corridor Sector Plan and Sectional Map Amendment*, the goals are to create an attractive and vibrant gateway to the City of College Park and the University of Maryland and to provide for concentrations of vertical, mixed-use development, including residential. Planned future land use permits a full range of commercial uses and encourages higher density residential uses. A Mixed-Use Infill Zone is recommended to allow a mix of residential and commercial development within the sector plan boundary. Specific recommendations for the area south of Paint Branch Parkway and east of US 1 (known as the East Campus district of the University of Maryland) include development with a vertical and horizontal mix of uses serving both the university and the community, and improvements to transform Paint Branch Parkway into a boulevard including a landscaped median and sidewalks. Specific recommendations for the undeveloped area north of Paint Branch Parkway and east of US 1 include protection of important natural features and passive recreational uses.

In the University of *Maryland Campus Master Plan*, future development sites that could accommodate an additional 6.6 million square feet of new construction have been identified in eight main campus districts.

**Riverdale Park.** The *Planning Area 68 Master Plan* (1994) focuses on revitalization efforts including protecting and reinforcing the character of the area's established and historic neighborhoods; encouraging residential development in commercial areas to create lively, vibrant places where people can live, work, and shop; and improving the look and function of the area's major commercial corridors, such as Kenilworth Avenue.

The *Approved Transit District Development Plan for the College Park-Riverdale Transit District Overlay Zone* (1997) has the goal of creating an attractive, pedestrian-friendly transit district that reduces reliance on the automobile; allows for office, retail, trades and services, recreational, hotel, residential and light industrial uses; and creates an urban setting in the northern half of the transit district with continuation of the existing block pattern and a suburban campus setting in the southern half. A major objective of the plan is to provide a coordinated network of transportation facilities so as to improve mobility within the transit district and increase accessibility to other major activity centers within Prince George's County and the region.

**New Carrollton.** The *Bladensburg-New Carrollton and Vicinity Master Plan and Sectional Map Amendment* (1997) includes capitalizing on appropriately located Metro station areas as focal points of commercial, office, and community activities; strengthening and revitalizing existing commercial areas, with particular emphasis on orienting them to transit facilities;



minimizing the impact of through traffic by encouraging the use of rapid transit facilities and connecting services; and utilizing opportunities to concentrate new residential densities within easy reach of Metro where such development would not have an adverse impact upon the character of existing neighborhoods.

In the *New Carrollton Transit-Oriented Development Strategy Planning Study* (2004), the vision is to transform the station area into the Carrollton Center – a lively downtown area with a multimodal transportation hub and an urban mixture of high-quality land uses. The strategy to create successful transit-oriented development is based on neighborhoods, environment, and transportation. The study proposes higher intensity residential, office and institutional uses focused around the transit station, and redevelopment of Annapolis Road with higher intensity residential uses and an updated, up-market mix of commercial uses. The study includes future, additional transit service, such as the Purple Line, to allow for new cross-county service and to complement the existing major regional transportation hub.

Areas identified within the New Carrollton transit oriented development (TOD) planning study that are adjacent to the Purple Line alignment include the Annapolis Road Corridor, Residential Hillside, and the Metro Core. The Annapolis Road Corridor is envisioned as a comprehensively redeveloped mixed-use residential and commercial corridor. The Residential Hillside would continue to contain stable single-family and multifamily residential neighborhoods. The Metro Core would be characterized in the future by a high concentration and mix of denser land uses and the economic activities that attract large government and other professional services, major educational services, and high-intensity commercial and residential uses within walking distance of the station. The Purple Line would run adjacent to the northern boundary of this master plan area along Piney Branch Road between Sligo Creek Parkway and Flower Avenue, and between Carroll Avenue and 15<sup>th</sup> Avenue. In the *Annapolis Road Corridor Planning Study* (2004), new development centers are recommended that are transit-oriented and include a mix of uses. Orientation to bus, Metrorail, and future transit options are important elements for future development concepts. The Purple Line would support and attract a high concentration and mix of denser land uses proposed in the New Carrollton TOD planning study area.

### **Maryland Smart Growth Initiatives**

In 1997, the Maryland General Assembly enacted a package of legislation collectively referred to as the Neighborhood Conservation and Smart Growth Initiative. The Smart Growth legislation recognizes the important role local governments play in managing growth and determining the locations most suitable for State-funded projects. Smart Growth directs the State to target programs and funding to support established communities and locally designated growth areas, and to protect rural areas. The policy gives priority to central business districts, downtown cores, empowerment zones, and revitalization areas when funding infrastructure projects or locating new facilities. The Urban Ring Communities inside the Capital Beltway in Montgomery County have been designated as part of the State's Smart Growth initiative, a program that focuses development funds and incentives in appropriate growth areas and limits development in agricultural and other resource areas.



The Maryland Smart Growth Program has three basic goals: to save valuable remaining natural resources and open space; to support and revitalize existing communities and neighborhoods; and to discourage sprawling development into rural areas. As part of this initiative, the Smart Growth Areas legislation requires that state funding for projects in Maryland municipalities, other existing communities, industrial areas, and planned growth areas designated by counties will receive priority funding over other projects. These Smart Growth Areas are called Priority Funding Areas (PFAs).

PFAs consist of existing communities and other locally designated and State-approved areas in accordance with Smart Growth planning guidelines. They seek to guide development to existing towns, communities, and business areas by directing State infrastructure improvements to those places where local governments need State investment to support future growth. Growth-related projects covered by the legislation include most State programs that encourage or support growth and development. PFAs are locations where the State and local governments want to target their efforts to encourage and support economic development and new growth. Areas that qualify as PFAs include every municipality, as they existed in 1997; areas inside the Washington Beltway and the Baltimore Beltway; and areas already designated as enterprise zones, neighborhood revitalization areas, heritage areas, and existing industrial land. All of the area within the Capital Beltway is a PFA and therefore the Purple Line complies with the Smart Growth program.

### **Enterprise Zones**

An enterprise zone is an area of a county, city, or town in which state and local incentives and assistances are offered to encourage the expansion of existing businesses and attract new business investment and jobs. Enterprise zones in Maryland allow businesses within these zones to be eligible for tax incentives, such as income tax credits and real property tax credits, in return for job creation and investments made in the zone. Businesses that locate within the Prince George's County or Takoma Park/Long Branch enterprise zones may also be eligible for personal property tax credits. The proposed transit corridor falls within the Silver Spring Enterprise Zone, Takoma Park/Long Branch Enterprise Zone, and within three sub-zones of the Prince George's County Enterprise Zone: the Annapolis Road Corridor Sub-Zone, International Corridor-Gateway Arts District Sub-Zone, and the Port Towns Sub-Zone, which are described in greater detail below.

The Silver Spring Enterprise Zone was designated by the State in 1996. It comprises the Silver Spring CBD and the area south of the CBD between the railroad tracks and Eastern Avenue to the Washington, D.C. boundary.

The Takoma Park/Long Branch Enterprise Zone is an initiative designed to encourage business development and job growth in certain sections of Takoma Park. It was designated by the State in 2003 and includes seven project areas primarily located along Piney Branch Road, University Boulevard, and New Hampshire Avenue.

The Prince George's County Enterprise Zone, located primarily inside the Capital Beltway, is divided into six sub-zones of which three are located within the study area. The Annapolis Road Corridor Sub-Zone includes the City of New Carrollton, the Town of Landover Hills, the Town



of Cheverly, and the unincorporated area of Lanham-Seabrook. The International Corridor-Gateway Arts District Sub-Zone includes retail, office, and industrial properties in Langley Park, Hyattsville, North Brentwood, Brentwood, and Mount Rainier. This sub-zone includes opportunities for reinvestment along University Boulevard in the International Corridor. The Port Towns Sub-Zone includes the Towns of Bladensburg, Cottage City, Colmar Manor, and Edmonston.

The Purple Line would be consistent with the Enterprise Zone goals of supporting business by improving access and mobility for employers, employees, and customers.

### **Empowerment Zones**

Empowerment zones are federally designated and may qualify for state enterprise zone tax credits. The proposed transit corridor is not located within an empowerment zone.

#### ***4.1.1. Potential Land Use***

##### **County and State Plans/Laws**

As stated previously, future growth along the Purple Line corridor would be controlled by the County land use plans for Montgomery and Prince George's Counties, which are based upon M-NCPPC's 1964 General Plan. The County land use plans are implemented through comprehensive zoning, subdivision regulation, adequate public facility ordinances, growth management controls, farmland preservation easements, and capital improvement programs. Development projects in Montgomery and Prince George's Counties require approval from M-NCPPC.

In the General Plan for Prince George's County, an overlay designation of Centers and Corridors is established within the Tiers. The Purple Line is located within the "Developed Tier," which consists of the area inside the Capital Beltway. The Centers and Corridors designate focal areas for increased efforts to encourage and concentrate development. Many of the designated Centers are located at Metrorail or MARC stations or at bus service hubs. High-quality housing and economic development in Centers and Corridors are also encouraged. Overall, the General Plan promotes new transit-oriented development, including more mixed-use development, in these designated Centers and Corridors. The Purple Line would support higher-density residential and commercial land uses around transit stations. It would also include transit stops at three designated Centers, including College Park/UM Metro, New Carrollton Metro, and Langley Park, and would create a transit connection between designated Corridors, including Baltimore Avenue, University Boulevard, and Annapolis Road.

##### **Local Master Plans**

The proposed transit corridor would traverse several neighborhoods and municipalities within Montgomery and Prince George's Counties. This assessment examines the No Build and Build Alternatives for consistency with the approved and adopted local master plans of these areas, described earlier.



## **No Build Alternative**

Under the No Build Alternative, land use would continue to be directed by existing local master plans. However, the No Build Alternative would not be compatible with planned developments, many of which emphasize transit-oriented development and transit access to existing stations. The No Build Alternative would not address east-west connectivity between existing activity centers within the corridor. It is also inconsistent with providing transit within the proposed corridor, which is an integral component of most of the local master plans.

## **Build Alternatives**

Most of the Purple Line alternatives have been planned on existing roadways. The alignments along the Georgetown Branch right-of-way are a key element of several area master plans in Montgomery County.

The *Woodmont Triangle Amendment to the Sector Plan for the Bethesda CBD* recommends capitalizing on the development and revitalization potential of this area as a transit-oriented urban neighborhood, especially as most of the area is within 2,500 feet of the Metro station, which is a basic guideline for a transit-oriented development (and it has an existing mix of uses). The Purple Line would provide transit service supporting the development of affordable housing and mixed-use development.

The *Bethesda Central Business District Sector Plan* supports higher-density development in a transit serviceable area. The Purple Line would provide transit supporting higher density, mixed-use development. The Purple Line would support the transportation recommendations in the Bethesda/Chevy Chase Master Plan, including connecting existing Metro stops and creating a stop at Connecticut Avenue. The project would also use the Georgetown Branch right-of-way, which has been designated for light rail use.

The Silver Spring CBD Sector Plan encourages future commercial development in the downtown area, including in the Fenton Village Revitalization Area. The CBD Sector Plan also focuses new development around the connected transportation systems in the CBD and around the existing Silver Spring Metrorail Station. The Purple Line would support these plans and planned growth in downtown Silver Spring with enhanced transit access. At the existing Silver Spring Metrorail Station, a new, expanded facility that includes transit-oriented development – housing, hotel, office, and retail – is being designed to accommodate the Purple Line.

As part of the vision of the Takoma Park Master Plan, the Takoma/Langley Crossroads Development Authority is leading an effort to improve conditions of the existing strip commercial centers at this site and a relocated and upgraded Bus Transfer Center. This effort is being coordinated with the Purple Line, as the transit alignment along University Boulevard would support revitalization of the existing Takoma/Langley commercial center and surrounding neighborhoods. The Purple Line proposes a transit stop at New Hampshire Avenue, which is consistent with the Takoma Park Master Plan.

The Purple Line would support anticipated growth identified in the *New Carrollton Transit-Oriented Development Strategy Planning Study*, which recommends transit-oriented



development near the New Carrollton Metrorail Station area. Future business uses envisioned for “Carrollton Center” include 8.7 million square feet of office/commercial space, 400,000 square feet of mixed-use retail, a 3,000-seat civic and cultural venue, and two 450-room hotels. The Purple Line is included in the Development Concept (described as the Bi-County Transitway). Thoroughfares that comprise the Purple Line alignment in this area are proposed for mixed-use development.

The recommendations in the *Annapolis Road Corridor Planning Study* include supporting transit-oriented development at the New Carrollton Metro Station, improvement to the transportation infrastructure, and design of the Purple Line to ensure good linkages between the proposed project and the Annapolis Road corridor. The Purple Line would support development of the Annapolis Road corridor by improving access to and from the corridor by employees and customers.

The Purple Line would be consistent with local land use plans by supporting transit-oriented, mixed-use, and higher-density development at existing and proposed stations. The master plans in Montgomery County for areas including Bethesda, Silver Spring, and Takoma Park encourage future development projects that offer integration with existing and planned transportation projects. These transit-oriented development policies also have encouraged continuing infill and redevelopment in areas along the Purple Line corridor.

### **Planned and Approved Development**

County Master Plans, and information obtained from local and county planning offices were examined to determine which future development sites would be affected by the Purple Line. These future approved project/development sites were identified as a change in near future land use. Table 4-1 lists those projects.

**Table 4-1: Planned and Approved Developments within the Study Area**

| <b>Name</b>                  | <b>Location</b>                                                                                               | <b>Potential Impacts</b>                                                      | <b>Status of Construction</b>  |
|------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------|
| Woodmont Corner              | Located at the northeast quadrant, intersection of Old Georgetown Road/Woodmont Avenue (7710 Woodmont Avenue) | The MTA is coordinating with the developer of this project to avoid impacts.  | Prior to 2030                  |
| Silver Spring Transit Center | Located southeast of Colesville Road and the WMATA Metrorail Red Line                                         | The Purple Line would be accommodated within the Silver Spring Transit Center | Construction completed by 2010 |
| 1050 Ripley Street           | Located south of Ripley and east of B&O Railroad                                                              | Yes                                                                           | Prior to 2030                  |
| 8215 Fenton Street           | Located northeast of Fenton and Silver Spring                                                                 | Yes                                                                           | Prior to 2030                  |
| Moda Vista Residences        | Located southeast of Silver Spring and Fenton                                                                 | Yes                                                                           | Prior to 2030                  |
| 836 Bonifant Street          | Located at 836 Bonifant Street                                                                                | Yes                                                                           | Prior to 2030                  |



**Table 4-1: Planned and Approved Developments within the Study Area**

| <b>Name</b>                                               | <b>Location</b>                                                                    | <b>Potential Impacts</b>                                                     | <b>Status of Construction</b> |
|-----------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------|
| Downtown Silver Spring                                    | Located on Fenton Street, Silver Spring Marriott Hotels                            | Yes.                                                                         | Prior to 2030                 |
| Jordan & Smith's Addition to Silver Spring (The Crescent) | Located at 930 Wayne Avenue, Approximately 300 feet east of Georgia Avenue         | Yes                                                                          | Prior to 2030                 |
| Midtown Silver Spring                                     | Located north of Ripley Street and west of Georgia Avenue                          | Yes                                                                          | Prior to 2030                 |
| 814 Thayer Avenue                                         | Located southeast of Thayer and Fenton                                             | Yes                                                                          | Prior to 2030                 |
| Silver Spring Library Replacement                         | Located at Fenton Street and Wayne Avenue (southwest corner)                       | Planning and design of the Library is being coordinated with the Purple Line | Prior to 2030                 |
| Long Branch Medical Building                              | Located at the southeast quadrant, intersection of Flower Avenue and Arliss Street | The MTA has coordinated with the County and the developers of this site.     | Prior to 2030                 |
| East Campus Redevelopment Initiative                      | Located at US 1 and Paint Branch Parkway (near entrance to University of Maryland) | The MTA is coordinating with the developers of this site.                    | Prior to 2030                 |
| College Park Metro Station Redevelopment                  | Located at River Road and Paint Branch Parkway                                     | The MTA is coordinating with WMATA and the developers of this site.          | Prior to 2030                 |
| New Carrollton TOD Plan                                   | Located within one-half mile of the New Carrollton Station                         | The MTA is coordinating with WMATA on these plans.                           | Prior to 2030                 |

*Source: Maryland-National Capital Planning Commission Montgomery and Prince George's County Planning Offices, 2007; Office of Eric Olson, Prince George's County Council Member, 2007; City of College Park, 2007.*

The No Build and TSM Alternatives would not impact any of these planned developments. The MTA continues to meet with local planning officials and the developers of the planned sites to allow for the incorporation of the Purple Line into the area and to minimize or avoid any potential impacts.

### **Compliance with Smart Growth Initiatives**

The principles of Smart Growth include creating a mix of land uses, providing a variety of transportation options, and strengthening and directing development to existing communities. Most of the neighborhoods along the Purple Line have, to some degree, prepared master plans that emphasize transit-oriented, mixed-use land use in developed areas adjacent to transit stations.

The policy of Smart Growth emphasizes locating public facilities and infrastructure in places where growth is planned to occur, and that growth should be directed to existing population centers. The Priority Funding Areas (PFAs) Act of 1997 defined where such state-funded development should take place and established specific PFAs throughout the State of Maryland.



As the entire Purple Line is located within the Inner Beltway PFA, the benefits from investment in the proposed project will reinforce the principles of Smart Growth. In addition, the Purple Line would serve to link enterprise zones located in both Montgomery and Prince George's County, including the Silver Spring Enterprise Zone, Takoma Park/Long Branch Enterprise Zone, and Prince George's County Enterprise Zone.

The Purple Line supports the Smart Growth Program in Maryland, where proposed development in currently built-up areas is encouraged to take better advantage of existing infrastructure, including transportation. The proposed project would complement current redevelopment activities occurring in and around Bethesda, Silver Spring, Takoma Park, Langley Park, College Park, Riverdale Park, and New Carrollton. Therefore, the Purple Line corridor would be compatible with, and supportive of, the goals and objectives of Maryland's Smart Growth Program.

## 5. Economic Setting and Potential Effects

### 5.1. Regional Employment Characteristics

According to the Constrained Long-Range Plan (CLRP)<sup>2</sup>, the “inner suburbs” (which includes Montgomery and Prince George’s Counties) are expected to experience a 28 percent increase in population from 2,760,000 in 2002 to 3,530,000 in 2030, and a 46 percent increase in employment from 1,460,000 in 2002 to 2,120,000 in 2030.

The available workforce consists of the civilian, non-institutional population, 16 years of age and older. Montgomery and Prince George’s Counties account for nearly 18 percent and 15 percent of the State’s available workforce, respectively, as shown in Table 5-1. The unemployment rate for the State of Maryland is lower than the rate for the United States, as shown in Table 5-2.

**Table 5-1: Workforce Availability**

| Area                   | Workforce | % of State Workforce |
|------------------------|-----------|----------------------|
| Maryland State         | 2,987,902 | 100.0%               |
| Montgomery County      | 524,071   | 17.5%                |
| Prince George’s County | 453,803   | 15.2%                |

*Sources: Maryland Department of Labor, June 2007; U.S. Census Bureau, Census 2000, Summary File 3*

**Table 5-2: Employment Rates**

| Area                   | Unemployment Rate | Participation in Workforce |
|------------------------|-------------------|----------------------------|
| Maryland State         | 3.5%              | 65.7%                      |
| Montgomery County      | 3.2%              | 70.7%                      |
| Prince George’s County | 4.2%              | 70.8%                      |
| United States          | 4.5%              | 63.9%                      |

*Sources: United States Department of Labor, June 2007; U.S. Census Bureau, Census 2000, Summary File 3*

According to Census 2000 data, only 10 percent of workers in Montgomery County worked outside the county, compared to 14 percent of workers in Prince George’s County. From 1990 to 2000, the proportion of employees working outside their county of residence increased, but the proportion of employees working outside their state of residence, Maryland, actually decreased. The average commute time for workers in Prince George’s County (35.9 minutes) was approximately three minutes longer than for workers in Montgomery County in 2000 (32.8 minutes). A larger proportion of workers in Prince George’s County commute by car, truck, or van than Montgomery County, as more workers in Montgomery County commute by public transportation.

<sup>2</sup> Metropolitan Washington Council of Governments, “What’s in the Plan for 2030?,” The Regional Long-Range Transportation Plan, 2006



**Table 5-3: Employment by Occupation in Montgomery and Prince George's Counties**

| Industry                          | Total Employed | % of Employed Population |
|-----------------------------------|----------------|--------------------------|
| <i>Government Total</i>           | 160,752        | 21%                      |
| Federal                           | 65,666         | 8%                       |
| State                             | 18,229         | 2%                       |
| Local                             | 76,857         | 10%                      |
| <i>Private Sector Total</i>       | 617,024        | 79%                      |
| Natural Resources & Mining        | 1,002          | 0%                       |
| Construction                      | 63,014         | 8%                       |
| Manufacturing                     | 24,764         | 3%                       |
| Trade, Transportation & Utilities | 125,985        | 16%                      |
| Information                       | 22,455         | 3%                       |
| Financial Activities              | 49,636         | 6%                       |
| Professional & Business Services  | 149,594        | 19%                      |
| Education & Health Services       | 85,334         | 11%                      |
| Leisure & Hospitality             | 62,735         | 8%                       |
| Other Services/Unclassified       | 32,505         | 4%                       |
| <b>Total</b>                      | <b>777,776</b> | <b>100%</b>              |

*Source: Maryland Department of Labor, Licensing and Regulation. Date of data: 2006*

In 2006, the average weekly wage of Montgomery County residents was \$1,084, compared to \$880 for Prince George's County.<sup>3</sup> In terms of educational attainment, 56 percent of residents of Montgomery County and 29 percent of Prince George's County residents have bachelor's degrees.<sup>4</sup>

The Metropolitan Washington Council of Governments (MWCOG) is responsible for maintaining and updating regional population and employment figures for regional planning purposes. According to MWCOG's employment data for 2000 and projections for 2030, Montgomery County's population is projected to increase by 24 percent, and Prince George's County by 20 percent. Prince George's County is expected to experience a greater growth in employment (68 percent) as compared to a 29 percent increase in employment in Montgomery County.

#### **5.1.1. Tax Base**

In Maryland, real estate is assessed once every three years. The general county tax rate in Montgomery County for fiscal year 2006 was \$0.679 per \$100.00 of assessed value. The general county tax rate in Prince George's County for fiscal year 2006 was \$0.960 per \$100.00 of assessed value. In both counties, owner-occupied houses are assessed at 100 percent of the full-assessed value.

<sup>3</sup> Maryland Department of Labor, Licensing and Regulation (2006)

<sup>4</sup> Maryland State Department of Education and Higher Education Commission (2005)

## **5.2. Purple Line Corridor Employment Characteristics**

Regional employment centers in Montgomery and Prince George's Counties include Bethesda, Silver Spring, Takoma Park/Langley Park, the University of Maryland in College Park, and New Carrollton. These centers are established inner-ring communities with high-intensity development located outside of Washington, D.C., but within the metropolitan Washington region. Each of these activity centers contains a mix of retail, office, industrial, commercial, and residential land uses that support major employment and residential bases.

In addition, a number of regional shopping areas are located in the corridor, including the International Corridor on University Boulevard, College Park, and Annapolis Road in New Carrollton. Smaller local retail and service establishments are interspersed on the roadways that connect the corridor's centers. The corridor contains a growing population that is expected to continue to increase and thus rely heavily on transit to reach these activity and employment centers.

Within the study area there are 11 major employers with more than 1,000 employees each: the National Institutes of Health, the National Naval Medical Center, Suburban Hospital, and Verizon located in Bethesda; the National Oceanic and Atmospheric Administration, Discovery Communications, Montgomery College, Holy Cross Hospital, the United States Postal Service in Silver Spring, the University of Maryland in College Park, and the U.S. Internal Revenue Service in New Carrollton.

Major regional activity centers along the proposed corridor include the Bethesda CBD, Silver Spring CBD, and New Carrollton, according to the "Metropolitan Washington Regional Activity Centers and Clusters" (2007).<sup>5</sup> Regional activity centers have been used extensively as a technical and policy tool to analyze the potential effects of growth and change in the region. Both the Bethesda and Silver Spring CBDs in Montgomery County were identified as Mixed-Use Centers. Mixed-Use Centers are generally urban in character and contain either a dense mix of retail, employment, and residential activity or substantial levels of employment and housing; they are accessible by transit or commuter rail and by major highways. The Bethesda CBD is projected to experience a 19 percent increase in jobs from 34,833 in 2005 to 41,567 in 2030. The Silver Spring CBD is projected to experience a 16 percent increase in jobs from 29,741 in 2005 to 34,626 in 2030. New Carrollton is identified as a Suburban Employment Center. Suburban Employment Centers are more dispersed, lower-density areas. New Carrollton is projected to experience a 76 percent increase in jobs from 8,705 in 2005 to 15,339 in 2030, according to the MWCOG Round 7.0 Cooperative Forecasts.

Population and employment growth along the proposed transit corridor was analyzed using MWCOG's Transportation Analysis Zone (TAZ) population and employment data within the neighborhood study area boundary. Within the study area, the population and employment growth projections are almost equivalent with a 33 percent increase in population and a 32 percent increase in employment (see Table 5-4).

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<sup>5</sup> Regional activity centers were identified by MWCOG's Metropolitan Development Policy Committee



**Table 5-4: Expected Growth within the Study Area**

|            | <b>2000</b> | <b>2030</b> | <b>Projected Increase</b> | <b>Percent Change</b> |
|------------|-------------|-------------|---------------------------|-----------------------|
| Population | 168,555     | 224,489     | 55,934                    | 33%                   |
| Employment | 148,067     | 195,323     | 47,256                    | 32%                   |

*Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006*

As shown in Table 5-5, all four employment sectors within the study area are expected to experience similar increases in growth between 2000 and 2030. However, employment in office and other sectors greatly outweigh the retail and industrial sectors by having the largest number of jobs.

**Table 5-5: Expected Growth by Employment Sector within the Study Area**

|              | <b>2000</b>    | <b>2030</b>    | <b>Projected Increase</b> | <b>Percent Change</b> |
|--------------|----------------|----------------|---------------------------|-----------------------|
| Office       | 57,165         | 75,776         | 18,611                    | 33%                   |
| Retail       | 21,067         | 28,542         | 7,475                     | 36%                   |
| Industrial   | 7,198          | 9,799          | 2,601                     | 36%                   |
| Other        | 62,637         | 81,206         | 18,569                    | 30%                   |
| <b>Total</b> | <b>148,067</b> | <b>195,323</b> | <b>47,256</b>             | <b>32%</b>            |

*Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.*

### **5.3. Economic Effects**

#### **5.3.1. Regional Economic Effects**

The Purple Line is anticipated to support anticipated commercial growth in both Montgomery and Prince George's Counties while enhancing transportation connections between existing high-density residential areas, regional shopping centers, and major employment centers. Efficient, rapid, and high capacity transit for east-west travel would connect major employment centers for those who want to access existing north-south rapid transit services, particularly Metrorail and MARC. In addition, the project is anticipated to support planned transit-oriented development at some station locations.

The Purple Line is anticipated to have a positive economic impact upon the region as it would provide improved transit service to existing centers of employment, such as Bethesda, Silver Spring, University of Maryland, and New Carrollton, as well as other commercial areas, including Flower Avenue, Langley Park, and Riverdale Park. An improvement in transit service is anticipated to support the revitalization of Silver Spring as it undergoes major renovations and new construction. Other areas, such as Takoma Park, Langley Park, College Park, Riverdale Park, and New Carrollton, are anticipated to also benefit from a quality transit system.



New transportation capacity and connections are anticipated to create competitive advantages for businesses in the corridor. The Purple Line would provide intermodal connections in the region's transportation system by providing transit links to both branches of the Metrorail Red Line (Bethesda and Silver Spring Stations), Green Line (College Park Station), and Orange Line (New Carrollton Station). The Purple Line would also provide a direct link to the Brunswick, Camden, and Penn Lines of the Maryland MARC commuter rail system. The proposed integrated transportation system is anticipated to help support economic activity and growth.

The Purple Line is planned to increase accessibility and mobility for residents along the corridor, thereby increasing job opportunities available to this population. Neighborhoods along the corridor are projected to add 47,256 jobs by 2030 as a result of growth anticipated in the MWCOG Cooperative Forecasting Program<sup>6</sup>. The proposed transit service could encourage the concentration of those jobs along the alignment, which would provide more efficient access to them. In addition, the Purple Line would be accessible to major employers, many of which are within walking distance of the proposed station locations.

The Purple Line is anticipated to have positive effects on commercial and residential properties near transit stations. The Purple Line is anticipated to enhance economic development by encouraging or supporting higher-density residential and commercial land uses around transit stations. It is anticipated that new development around station areas in the corridor would also improve access for employees from businesses outside Montgomery and Prince George's Counties, providing net economic benefits. The construction, operation, and subsequent market response to the availability of this improved level of transit service is anticipated to influence economic activity in Montgomery and Prince George's Counties, as well as the broader metropolitan Washington region, although substantial growth attributed to the Purple Line alone is not anticipated.

The construction and operation of the system is anticipated to have positive benefits to the local economy, including direct and indirect employment impacts. Direct impacts would result from construction labor; employment related to the production of the goods and materials for the project; and design, engineering, and architectural services employment. Indirect impacts would result from the "multiplier effect" of these expenditures in the local economy. In addition to new jobs from construction, there is anticipated to be long-term employment impacts from the additional jobs created to operate and maintain the new transit service. This new employment would have a multiplier effect on the local economy, resulting in additional expenditures and job creation.

### ***5.3.2. Tax Base Effects***

The proposed LRT and BRT alternatives would require some property right-of-way acquisition, resulting in loss of taxable property from the tax base. Both Montgomery County and Prince George's County assess property taxes based on market value. Properties that would need to be

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<sup>6</sup> MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A, October 18, 2006.





acquired for construction of the Purple Line contribute a very small amount of taxes relative to the overall tax base; substantial impacts to fiscal conditions are not anticipated.

A new east-west, cross-county transit service between Bethesda and New Carrollton that provides improved links among regional employment, recreational, cultural, and residential areas, and that provides alternatives to traveling by automobile or by existing bus service, is anticipated to have a net positive effect on the tax base as a result of increases in economic activity and better accommodations of expected population and employment growth.

### ***5.3.3. Study Area Business and Employment Effects***

The following section examines potential local economic effects, and business and institutional impacts, of the Purple Line. General descriptions of the effects on business districts that surround the alignment are provided below, followed by descriptions and summaries of preliminarily identified non-residential property impacts of the various alternatives. The overall long term effects of the project on business conditions are anticipated to be positive. The project is expected to support planned growth and local economic activity consistent with regional plans and policies described earlier. The Build Alternatives are anticipated to benefit local business and employment conditions along the project corridor by improving access to businesses and institutions, particularly those within walking distance of the proposed stations. Construction activities are anticipated to have temporary economic benefits through construction period employment and increased sales at local businesses through construction worker spending.

Construction disturbance associated with both the BRT and LRT alternatives would extend beyond the existing public rights-of-way that their alignments follow in some cases, resulting in impacts to some of the commercial and institutional properties that abut the proposed alignments. Direct property impacts from construction associated with the Purple Line could have negative impacts on some of these business and institutional uses along the corridor that are anticipated to have property impacted by Purple Line construction, based on preliminary estimates of grading and construction disturbance. Some losses of onsite parking may occur on either a temporary or permanent basis, creating an inconvenience for some businesses and their customers.

The anticipated displacement of between approximately 2 and 17 business properties would result in the relocation of workers at those businesses, although the number of jobs that are anticipated to be displaced would be small compared to overall employment along the corridor. Goods and services provided by the businesses that have preliminarily been identified for displacement are typical of businesses within the larger study area for socioeconomic conditions.

Positive business and institutional socioeconomic effects of the project are anticipated to include improving accessibility for residents, workers, students, shoppers, and visitors along the corridor, and potentially providing a stimulus for community revitalization in some areas of the corridor where vacancies now exist. The presence of the new transit facility is anticipated to reinforce the role of downtown areas as employment centers and destinations for shopping and services. In these areas, and in other areas where transit facilities are not immediately available, the presence of Purple Line stations could potentially result in induced or secondary development, and could potentially generate additional patronage of area stores and additional employment opportunities.



Limited induced growth within the vicinity of station areas resulting from the Purple Line could generate additional jobs in each of these areas and broaden the range of services that are available to area residents, workers, and visitors. The project is anticipated to also support future planned commercial and institutional growth, and in some cases provide new or increased transit access for potential TOD developments.

As stated above, construction activities associated with the Purple Line would also have direct impacts to nonresidential properties in some portions of the corridor that could have negative effects, resulting in business displacements in some cases, and partial business or institutional property impacts affecting landscaping, yard, or off-street parking areas in other cases. Preliminary business and institutional property impacts of the Low, Medium, and High Investment Alternatives are based on construction limits of disturbance (LOD) drawings for the Build Alternatives updated through March 2008 by project engineers. It should be noted that the property acquisitions identified are preliminary, and are identified for the purpose of providing information on the general order of magnitude of property impacts, to allow a comparison of the Purple Line alternatives. These impacts may not ultimately be required for construction of the Purple Line. Determinations regarding property acquisition will be made during the final design phase of the project and following the issuance of a Record of Decision, when necessary property impacts will be verified.

All attempts will be made in the design of the project to avoid direct property impacts. Temporary construction easements may be required in cases where excavation and construction disturbance are anticipated to be temporary, while partial property acquisition of strips of property frontage of some businesses and institutions may be required in other cases where construction activities would impact business or institutional properties. Restoration of off-street parking spaces impacted by construction may be possible in some instances, resulting in temporary construction period economic effects. In other cases, off-street parking serving businesses and institutions may be permanently impacted.

All property acquisition will be conducted in conformance with the Uniform Relocation and Real Property Acquisitions Policies Act of 1970 (42 USC 4601), as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (P.L.100-17) and Public Law 105-117. State funded projects in Maryland must comply with Sections 2-112 and Subtitle 2, Section 12-201 to 12-212 of the Real Property Article of the Annotated Code of Maryland. Business properties that would be displaced will be acquired at fair market value with compensation provided for moving expenses.

Potential business displacements where buildings are anticipated to be directly impacted by construction activities associated with the Purple Line (or businesses that would have property impacts from Purple Line construction that would substantially affect their operations such that they would no longer be viable) are not expected to substantially impact economic conditions in the socioeconomic study area. The magnitude of jobs that would be impacted through such displacements would be small in comparison to the overall level of employment in the study area and the level of employment in the specific sectors that they represent (primarily the retail and office sectors).



As shown in Table 5-6, potential business property displacements resulting from Purple Line construction range from two businesses under the BRT Low Investment Alternative to 19 under the LRT Low Investment Alternative. The Lyttonsville maintenance and storage facility for LRT is anticipated to require the displacement for two business properties on Brookville Road. The displacements identified are business properties, and as such may contain more than one business; for example, the properties along the CSX corridor include two strip shopping centers. The two design options, Silver Spring/Thayer Avenue and Preinkert/Chapel Drive, would not have different impacts from the High and Medium Investment Alternatives for which they are options.

**Table 5-6: Business Property Displacements**

|                                               | <b>Low<br/>Invest.<br/>BRT</b> | <b>Med.<br/>Invest.<br/>BRT</b> | <b>High<br/>Invest.<br/>BRT</b> | <b>Low<br/>Invest.<br/>LRT</b> | <b>Med.<br/>Invest.<br/>LRT</b> | <b>High<br/>Invest.<br/>LRT</b> |
|-----------------------------------------------|--------------------------------|---------------------------------|---------------------------------|--------------------------------|---------------------------------|---------------------------------|
| Brookville Road                               | 0                              | 0                               | 0                               | 1-2                            | 1-2                             | 1-2                             |
| Georgetown Branch ROW near Stewart Avenue     | 0                              | 0                               | 0                               | 2                              | 2                               | 2                               |
| CSX corridor                                  | 1                              | 2                               | 2                               | 4                              | 4                               | 4                               |
| Bonifant Street                               | N/A                            | 1                               | N/A                             | 1                              | 1                               | N/A                             |
| Silver Spring Avenue, west of Georgia Avenue  | N/A                            | N/A                             | 1-2                             | N/A                            | N/A                             | 1-2                             |
| University Boulevard                          | 0                              | 3                               | 3                               | 3                              | 3                               | 3                               |
| Kenilworth Avenue                             | 0                              | 2                               | 2                               | 2                              | 2                               | 2                               |
| East West Highway in Riverdale Park           | 0                              | 0                               | 0                               | 1                              | 1                               | 2                               |
| Annapolis Road                                | 1                              | 0                               | 0                               | 1                              | 0                               | 0                               |
| Lyttonsville Maintenance and Storage Facility | 0                              | 0                               | 0                               | 2                              | 2                               | 2                               |
| <b>Total</b>                                  | <b>2</b>                       | <b>8</b>                        | <b>8-9</b>                      | <b>17-18</b>                   | <b>17-18</b>                    | <b>17-19</b>                    |

As indicated in Table 5-7, the number of businesses with direct property impacts from the Purple Line that would either temporarily or permanently affect at least some onsite parking ranges from 25 businesses to 36 businesses, with the Low Investment LRT Alternative having the greatest impacts to business parking resources. In most cases, the number of off-street parking spaces impacted, either temporarily (during construction only) or permanently, is low and is not anticipated to substantially affect business operations. The two design options, Silver Spring/Thayer Avenue and Preinkert/Chapel Drive, would not have different impacts from the High and Medium Investment Alternatives for which they are options.

**Table 5-7: Business Properties with Permanent Parking Impacts, by Alternative**

| <b>Segment</b>                      | <b>Low Inv.<br/>BRT</b> | <b>Medium<br/>Inv. BRT</b> | <b>High Inv.<br/>BRT</b> | <b>Low Inv.<br/>LRT</b> | <b>Medium<br/>Inv. LRT</b> | <b>High Inv.<br/>LRT</b> |
|-------------------------------------|-------------------------|----------------------------|--------------------------|-------------------------|----------------------------|--------------------------|
| Bethesda/ Chevy Chase               | 0                       | 0                          | 0                        | 0                       | 0                          | 0                        |
| Silver Spring                       | 0                       | 1                          | 2                        | 2                       | 2                          | 2                        |
| University Boulevard                | 18                      | 17                         | 18                       | 18                      | 18                         | 18                       |
| University of Maryland/College Park | 1                       | 1                          | 1                        | 1                       | 1                          | 1                        |
| Riverdale Park                      | 5                       | 6                          | 5                        | 8                       | 8                          | 4                        |
| New Carrollton                      | 5                       | 1                          | 1                        | 7                       | 0                          | 0                        |
| <b>Total</b>                        | <b>29</b>               | <b>26</b>                  | <b>27</b>                | <b>36</b>               | <b>29</b>                  | <b>25</b>                |



## 6. Environmental Justice

“Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies,” (Environmental Protection Agency website). Issued by President Clinton on February 11, 1994, Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, directs federal agencies to identify and address disproportionately high and adverse human health or environmental effects that its programs, policies, and activities may have on minority and low-income populations. An analysis of potential environmental justice considerations for the Purple Line was performed in accordance with US Department of Transportation (USDOT), Federal Highway Administration, (FHWA) Federal Transit Administration (FTA), and the Council on Environmental Quality (CEQ) guidelines for addressing environmental justice under all programs, policies, and activities.

### 6.1. Overview

CEQ developed *Environmental Justice – Guidance under the National Environmental Policy Act* (1997) to assist federal agencies in integrating environmental justice concerns with their NEPA procedures. Environmental justice concerns should be considered at each step of the NEPA process.

The US Department of Transportation developed an environmental justice strategy that sets forth the process for USDOT and its Operating Divisions to integrate the goals of EO 12898. The Order on Environmental Justice (DOT Order 5610.2) is an internal directive based on the framework of NEPA, Title VI of the 1964 Civil Rights Act, the Uniform Relocation Assistance and Real Property Acquisition Act of 1970, the Intermodal Surface Transportation Efficiency Act of 1991, and other USDOT policies. DOT Order 5610.2 of 1997 defines the fundamental principles of environmental justice as:

- Avoiding, minimizing, or mitigating disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations
- Ensuring full and fair participation by all potentially affected communities in the transportation decision-making process
- Preventing the denial of, reduction in, or substantial delay in the receipt of benefits by minority and low-income populations

FHWA and FTA established policies and procedures for complying with EO 12898 and USDOT Order 5610.2 in a joint order issued December 2, 1998 entitled *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations 6640.23* (DOT Order 6640.23). The Order focuses on preventing disproportionately high and adverse effects and taking actions to address such effects, where they occur.



Definition of terms used in this analysis includes the following:

- *Low-Income* – a household income at or below the Department of Health and Human Services poverty guidelines
- *Minority* – a person who is Black, Hispanic, Asian American, American Indian, or Alaskan Native
- *Adverse Effects* – the totality of substantial adverse individual or cumulative human health or environmental effects
- *Disproportionately High and Adverse Effect on Minority and Low-Income Population* – an adverse effect that is predominately borne by a minority and/or low-income population or an adverse effect that will be suffered by the minority and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority and non-low-income population

## **6.2. Methodology**

The CEQ guidance was used to develop the approach for this analysis. The methodology consisted of the following steps:

- Determine the criteria for minority and low-income populations within the study area
- Identify and characterize the environmental justice populations within the study area
- Analyze the location and severity of anticipated impacts associated with the alternatives of the project
- Determine disproportionate high and adverse impacts, full and fair access, and denial of benefits to environmental justice populations

The CEQ and USDOT guidelines generally describe minority and low-income populations as “any readily identifiable groups of minority and/or low-income people who live in geographic proximity...” Furthermore, the CEQ guidance states that minority populations should be identified where either (1) the minority population of affected areas exceeds 50 percent, or (2) the minority population percentage of an affected area is meaningfully greater than that percentage of the general population or other appropriate unit of geographic analysis. For this analysis, the same criteria will be used for low-income populations.

Census 2000 block group data were used to determine the demographics of the study area. The census block groups are the smallest unit for which both racial, Hispanic, and income data are available. 2000 was the first year that the US Census recorded Hispanic ethnicity as distinguished from race. For this study minority populations were defined as those who self identified as some race other than white alone, or as Hispanic (regardless of race). The overall population of the study area is approximately 141,000; 64.6 percent of these people identified themselves as minorities, and 11.6 percent met the definition of low-income. The minority and low-income percentages in the study area block groups within Montgomery County are 56.3 percent and 9.3 percent, respectively. The minority and low-income percentages in the study area block groups within Prince George’s County are 73.2 percent and 14.6 percent, respectively.



For the project, it was determined that block groups in which more than 50 percent of the population was minorities would be considered minority populations. To be more inclusive of low-income populations and in accordance with the CEQ guideline's concept of "meaningfully greater," block groups that exceeded 11.6 percent low-income, the study area average, are also considered low-income populations. The study area low-income threshold of 11.6 percent is more than 50 percent greater than the poverty level in either Montgomery County (5.4 percent) or Prince George's County (7.7 percent). This was determined to represent "meaningfully greater" as required by the CEQ guidance. This percentage falls between the percentages for the Montgomery County portion of the study area (9.3 percent) and the Prince George's County portion of the study area (14.6 percent). It is also greater than the percentages of either county as a whole (Montgomery County, 5.4 percent and Prince George's County, 7.7 percent) and the state of Maryland (8.5 percent).

### **6.3. Location and Characteristics**

Table 6-1 and Table 6-2 identify each block group in the study area, its demographics, and whether the block group meets thresholds for environmental justice populations. Table 6-1 presents information on minorities and indicates whether the block group resulted in classification as meeting the environmental justice threshold for minorities. Table 6-2 presents information on low income populations and indicates whether the block group resulted in classification as meeting the environmental justice threshold for low income. The census tracts meeting environmental justice thresholds are shown in Figure 6-1. Of the 90 census tracts in the corridor, 64 meet the environmental justice thresholds.

#### **6.3.1. Supplemental Data**

To corroborate the findings of the Census, and to support public outreach activities, supplemental sources were consulted regarding low-income and minority populations within the corridor. The supplemental sources included:

##### **County and Government Officials**

Planners from M-NCPPC both in Montgomery and Prince George's Counties and elected officials from Prince George's County were asked about changes in the populations of the corridor and the location of possible environmental justice communities. Responses included:

- Diversity of the populations of Takoma Park, Langley Park, and East Silver Spring has increased.
- Latino and African immigrant populations are rapidly expanding, most notably in the central portion of the study area.
- After English, Spanish is the most used language in the study area, although various Asian and African languages are used.
- The information provided on locations of environmental justice populations was consistent with U.S. Census 2000 data.



**Table 6-1: Environmental Justice Populations - Minority**

| Block Group                          | Population | White        | African-American or Black | Asian and Pacific Islander | Other      | Two or More Races | Hispanic       | Total Minority | Environmental Justice Population |    |
|--------------------------------------|------------|--------------|---------------------------|----------------------------|------------|-------------------|----------------|----------------|----------------------------------|----|
|                                      |            |              |                           |                            |            |                   |                |                | Yes                              | No |
| Block Group 1, Census Tract 7017.02  | 1,802      | 462<br>25.6% | 705<br>39.1%              | 99<br>5.5%                 | 65<br>3.6% | 92<br>5.1%        | 379<br>21.0%   | 1,340<br>74.4% | ✓                                |    |
| Block Group 1, Census Tract 7017.03, | 1,318      | 347<br>26.3% | 415<br>31.5%              | 181<br>13.7%               | 6<br>0.5%  | 57<br>4.3%        | 312<br>23.7%   | 971<br>73.7%   | ✓                                |    |
| Block Group 3, Census Tract 7017.03  | 1,238      | 169<br>13.7% | 606<br>48.9%              | 59<br>4.8%                 | 69<br>5.5% | 35<br>2.8%        | 300<br>24.2%   | 1,069<br>86.3% | ✓                                |    |
| Block Group 1, Census Tract 7019     | 1,651      | 164<br>9.9%  | 314<br>19.0%              | 61<br>3.7%                 | 0<br>0.0%  | 27<br>1.6%        | 1,085<br>65.7% | 1,487<br>90.1% | ✓                                |    |
| Block Group 2, Census Tract 7019     | 716        | 365<br>51.0% | 107<br>14.9%              | 71<br>9.9%                 | 0<br>0.0%  | 0<br>0.0%         | 173<br>24.2%   | 351<br>49.0%   |                                  | ✓  |
| Block Group 1, Census Tract 7020     | 2,102      | 61<br>2.9%   | 607<br>28.9%              | 264<br>12.6%               | 59<br>2.8% | 26<br>1.2%        | 1,085<br>51.6% | 2,041<br>97.1% | ✓                                |    |
| Block Group 2, Census Tract 7020     | 1,161      | 76<br>6.5%   | 322<br>27.7%              | 213<br>18.3%               | 0<br>0.0%  | 69<br>5.9%        | 481<br>41.4%   | 1,085<br>93.5% | ✓                                |    |
| Block Group 3, Census Tract 7020     | 2,012      | 385<br>19.1% | 311<br>15.5%              | 142<br>7.1%                | 14<br>0.7% | 83<br>4.1%        | 1,077<br>53.5% | 1,627<br>80.9% | ✓                                |    |
| Block Group 1, Census Tract 7021.01  | 2,894      | 324<br>11.2% | 1,269<br>43.8%            | 224<br>7.7%                | 18<br>0.6% | 316<br>10.9%      | 743<br>25.7%   | 2,570<br>88.8% | ✓                                |    |
| Block Group 2, Census Tract 7021.01  | 1,250      | 273<br>21.8% | 359<br>28.7%              | 347<br>27.8%               | 14<br>1.1% | 82<br>6.6%        | 175<br>14.0%   | 977<br>78.2%   | ✓                                |    |
| Block Group 3, Census Tract 7022     | 1,667      | 611<br>36.7% | 341<br>20.5%              | 101<br>6.1%                | 15<br>0.9% | 31<br>1.9%        | 568<br>34.1%   | 1,056<br>63.3% | ✓                                |    |
| Block Group 4, Census Tract 7022     | 649        | 482<br>74.3% | 76<br>11.7%               | 60<br>9.2%                 | 0<br>0.0%  | 31<br>4.8%        | 0<br>0.0%      | 167<br>25.7%   |                                  | ✓  |
| Block Group 1, Census Tract 7023.01  | 1,487      | 153<br>10.3% | 376<br>25.3%              | 189<br>12.7%               | 0<br>0.0%  | 65<br>4.4%        | 704<br>47.3%   | 1,334<br>89.7% | ✓                                |    |
| Block Group 2, Census Tract 7023.01  | 2,296      | 598<br>26.0% | 774<br>33.7%              | 77<br>3.4%                 | 56<br>2.4% | 101<br>4.4%       | 690<br>30.1%   | 1,698<br>74.0% | ✓                                |    |

**Table 6-1: Environmental Justice Populations - Minority**

| Block Group                         | Population | White        | African-American or Black | Asian and Pacific Islander | Other      | Two or More Races | Hispanic     | Total Minority | Environmental Justice Population |    |
|-------------------------------------|------------|--------------|---------------------------|----------------------------|------------|-------------------|--------------|----------------|----------------------------------|----|
|                                     |            |              |                           |                            |            |                   |              |                | Yes                              | No |
| Block Group 2, Census Tract 7023.02 | 1,947      | 706<br>36.3% | 395<br>20.3%              | 125<br>6.4%                | 0<br>0.0%  | 108<br>5.5%       | 613<br>31.5% | 1,241<br>63.7% | ✓                                |    |
| Block Group 3, Census Tract 7023.02 | 1,348      | 496<br>36.8% | 407<br>30.2%              | 57<br>4.2%                 | 8<br>0.6%  | 44<br>3.3%        | 336<br>24.9% | 852<br>63.2%   | ✓                                |    |
| Block Group 1, Census Tract 7024.01 | 821        | 607<br>73.9% | 50<br>6.1%                | 44<br>5.4%                 | 0<br>0.0%  | 0<br>0.0%         | 120<br>14.6% | 214<br>26.1%   |                                  | ✓  |
| Block Group 2, Census Tract 7024.01 | 1,722      | 916<br>53.2% | 339<br>19.7%              | 40<br>2.3%                 | 37<br>2.1% | 138<br>8.0%       | 252<br>14.6% | 806<br>46.8%   |                                  | ✓  |
| Block Group 1, Census Tract 7024.02 | 1,352      | 305<br>22.6% | 701<br>51.8%              | 72<br>5.3%                 | 5<br>0.4%  | 31<br>2.3%        | 238<br>17.6% | 1,047<br>77.4% | ✓                                |    |
| Block Group 2, Census Tract 7024.02 | 1,047      | 376<br>35.9% | 373<br>35.6%              | 106<br>10.1%               | 9<br>0.9%  | 33<br>3.2%        | 150<br>14.3% | 671<br>64.1%   | ✓                                |    |
| Block Group 3, Census Tract 7024.02 | 2,214      | 768<br>34.7% | 719<br>32.5%              | 145<br>6.5%                | 0<br>0.0%  | 95<br>4.3%        | 487<br>22.0% | 1,446<br>65.3% | ✓                                |    |
| Block Group 1, Census Tract 7025    | 1,051      | 245<br>23.3% | 517<br>49.2%              | 0<br>0.0%                  | 0<br>0.0%  | 40<br>3.8%        | 249<br>23.7% | 806<br>76.7%   | ✓                                |    |
| Block Group 2, Census Tract 7025    | 1,578      | 538<br>34.1% | 682<br>43.2%              | 131<br>8.3%                | 0<br>0.0%  | 63<br>4.0%        | 164<br>10.4% | 1,040<br>65.9% | ✓                                |    |
| Block Group 1, Census Tract 7026.01 | 2,813      | 849<br>30.2% | 1,464<br>52.0%            | 241<br>8.6%                | 17<br>0.6% | 97<br>3.4%        | 145<br>5.2%  | 1,964<br>69.8% | ✓                                |    |
| Block Group 2, Census Tract 7026.01 | 593        | 291<br>49.1% | 122<br>20.6%              | 91<br>15.3%                | 0<br>0.0%  | 35<br>5.9%        | 54<br>9.1%   | 302<br>50.9%   | ✓                                |    |
| Block Group 3, Census Tract 7026.01 | 836        | 210<br>25.1% | 451<br>53.9%              | 39<br>4.7%                 | 7<br>0.8%  | 37<br>4.4%        | 92<br>11.0%  | 626<br>74.9%   | ✓                                |    |
| Block Group 2, Census Tract 7026.02 | 3,157      | 957<br>30.3% | 1,343<br>42.5%            | 267<br>8.5%                | 33<br>1.0% | 96<br>3.0%        | 461<br>14.6% | 2,200<br>69.7% | ✓                                |    |
| Block Group 1, Census Tract 7027    | 1,251      | 518<br>41.4% | 314<br>25.1%              | 96<br>7.7%                 | 21<br>1.7% | 27<br>2.2%        | 275<br>22.0% | 733<br>58.6%   | ✓                                |    |



**Table 6-1: Environmental Justice Populations - Minority**

| Block Group                         | Population | White          | African-American or Black | Asian and Pacific Islander | Other      | Two or More Races | Hispanic       | Total Minority | Environmental Justice Population |    |
|-------------------------------------|------------|----------------|---------------------------|----------------------------|------------|-------------------|----------------|----------------|----------------------------------|----|
|                                     |            |                |                           |                            |            |                   |                |                | Yes                              | No |
| Block Group 2, Census Tract 7027    | 2,914      | 473<br>16.2%   | 1,162<br>39.9%            | 78<br>2.7%                 | 28<br>1.0% | 108<br>3.7%       | 1,065<br>36.5% | 2,441<br>83.8% | ✓                                |    |
| Block Group 3, Census Tract 7027    | 1,446      | 764<br>52.8%   | 212<br>14.7%              | 205<br>14.2%               | 17<br>1.2% | 69<br>4.8%        | 179<br>12.4%   | 682<br>47.2%   |                                  | ✓  |
| Block Group 2, Census Tract 7028    | 903        | 791<br>87.6%   | 69<br>7.6%                | 0<br>0.0%                  | 0<br>0.0%  | 0<br>0.0%         | 43<br>4.8%     | 112<br>12.4%   |                                  | ✓  |
| Block Group 3, Census Tract 7028    | 2,698      | 987<br>36.6%   | 1,122<br>41.6%            | 194<br>7.2%                | 6<br>0.2%  | 116<br>4.3%       | 273<br>10.1%   | 1,711<br>63.4% | ✓                                |    |
| Block Group 4, Census Tract 7029    | 1,088      | 678<br>62.3%   | 253<br>23.3%              | 73<br>6.7%                 | 0<br>0.0%  | 20<br>1.8%        | 64<br>5.9%     | 410<br>37.7%   |                                  | ✓  |
| Block Group 5, Census Tract 7029    | 672        | 623<br>92.7%   | 33<br>4.9%                | 0<br>0.0%                  | 0<br>0.0%  | 0<br>0.0%         | 16<br>2.4%     | 49<br>7.3%     |                                  | ✓  |
| Block Group 1, Census Tract 7047    | 730        | 660<br>90.4%   | 0<br>0.0%                 | 29<br>4.0%                 | 27<br>3.7% | 2<br>0.3%         | 12<br>1.6%     | 70<br>9.6%     |                                  | ✓  |
| Block Group 2, Census Tract 7047    | 774        | 708<br>91.5%   | 0<br>0.0%                 | 18<br>2.3%                 | 0<br>0.0%  | 5<br>0.6%         | 43<br>5.6%     | 66<br>8.5%     |                                  | ✓  |
| Block Group 1, Census Tract 7048.01 | 1,451      | 997<br>68.7%   | 61<br>4.2%                | 221<br>15.2%               | 0<br>0.0%  | 84<br>5.8%        | 88<br>6.1%     | 454<br>31.3%   |                                  | ✓  |
| Block Group 2, Census Tract 7048.01 | 1,966      | 1,452<br>73.9% | 119<br>6.1%               | 215<br>10.9%               | 0<br>0.0%  | 41<br>2.1%        | 139<br>7.1%    | 514<br>26.1%   | ✓                                |    |
| Block Group 1, Census Tract 7048.02 | 887        | 632<br>71.3%   | 4<br>0.5%                 | 84<br>9.5%                 | 0<br>0.0%  | 37<br>4.2%        | 130<br>14.7%   | 255<br>28.7%   |                                  | ✓  |
| Block Group 2, Census Tract 7048.02 | 1,457      | 981<br>67.3%   | 111<br>7.6%               | 142<br>9.7%                | 8<br>0.5%  | 0<br>0.0%         | 215<br>14.8%   | 476<br>32.7%   |                                  | ✓  |
| Block Group 1, Census Tract 7050    | 2,007      | 1,869<br>93.1% | 39<br>1.9%                | 44<br>2.2%                 | 0<br>0.0%  | 0<br>0.0%         | 55<br>2.7%     | 138<br>6.9%    |                                  | ✓  |
| Block Group 2, Census Tract 7050    | 634        | 558<br>88.0%   | 0<br>0.0%                 | 11<br>1.7%                 | 0<br>0.0%  | 15<br>2.4%        | 50<br>7.9%     | 76<br>12.0%    |                                  | ✓  |

**Table 6-1: Environmental Justice Populations - Minority**

| Block Group                         | Population | White          | African-American or Black | Asian and Pacific Islander | Other      | Two or More Races | Hispanic     | Total Minority | Environmental Justice Population |    |
|-------------------------------------|------------|----------------|---------------------------|----------------------------|------------|-------------------|--------------|----------------|----------------------------------|----|
|                                     |            |                |                           |                            |            |                   |              |                | Yes                              | No |
| Block Group 3, Census Tract 7050    | 787        | 695<br>88.3%   | 0<br>0.0%                 | 22<br>2.8%                 | 14<br>1.8% | 8<br>1.0%         | 48<br>6.1%   | 92<br>11.7%    |                                  | ✓  |
| Block Group 4, Census Tract 7050    | 625        | 456<br>73.0%   | 0<br>0.0%                 | 56<br>9.0%                 | 1<br>0.2%  | 0<br>0.0%         | 112<br>17.9% | 169<br>27.0%   |                                  | ✓  |
| Block Group 5, Census Tract 7050    | 563        | 240<br>42.6%   | 183<br>32.5%              | 60<br>10.7%                | 0<br>0.0%  | 5<br>0.9%         | 75<br>13.3%  | 323<br>57.4%   | ✓                                |    |
| Block Group 1, Census Tract 7051    | 1,578      | 1,357<br>86.0% | 129<br>8.2%               | 48<br>3.0%                 | 0<br>0.0%  | 10<br>0.6%        | 34<br>2.2%   | 221<br>14.0%   |                                  | ✓  |
| Block Group 2, Census Tract 7051    | 1,883      | 1,632<br>86.7% | 40<br>2.1%                | 59<br>3.1%                 | 7<br>0.4%  | 32<br>1.7%        | 113<br>6.0%  | 251<br>13.3%   |                                  | ✓  |
| Block Group 1, Census Tract 7054    | 642        | 620<br>96.6%   | 0<br>0.0%                 | 0<br>0.0%                  | 0<br>0.0%  | 0<br>0.0%         | 22<br>3.4%   | 22<br>3.4%     |                                  | ✓  |
| Block Group 2, Census Tract 7054    | 948        | 897<br>94.6%   | 5<br>0.5%                 | 18<br>1.9%                 | 0<br>0.0%  | 16<br>1.7%        | 12<br>1.3%   | 51<br>5.4%     |                                  | ✓  |
| Block Group 3, Census Tract 7054    | 1,136      | 1,004<br>88.4% | 6<br>0.5%                 | 44<br>3.9%                 | 0<br>0.0%  | 30<br>2.6%        | 52<br>4.6%   | 132<br>11.6%   |                                  | ✓  |
| Block Group 2, Census Tract 8036.02 | 945        | 0<br>0.0%      | 928<br>98.2%              | 0<br>0.0%                  | 0<br>0.0%  | 17<br>1.8%        | 0<br>0.0%    | 945<br>100.0%  | ✓                                |    |
| Block Group 3, Census Tract 8036.05 | 1,166      | 131<br>11.2%   | 632<br>54.2%              | 111<br>9.5%                | 0<br>0.0%  | 51<br>4.4%        | 241<br>20.7% | 1,035<br>88.8% | ✓                                |    |
| Block Group 1, Census Tract 8036.12 | 1,228      | 391<br>31.8%   | 663<br>54.0%              | 0<br>0.0%                  | 16<br>1.3% | 29<br>2.4%        | 129<br>10.5% | 837<br>68.2%   | ✓                                |    |
| Block Group 1, Census Tract 8036.13 | 1,323      | 312<br>23.6%   | 795<br>60.1%              | 33<br>2.5%                 | 0<br>0.0%  | 114<br>8.6%       | 69<br>5.2%   | 1,011<br>76.4% | ✓                                |    |
| Block Group 2, Census Tract 8036.13 | 1,875      | 134<br>7.1%    | 1,486<br>79.3%            | 109<br>5.8%                | 0<br>0.0%  | 53<br>2.8%        | 93<br>5.0%   | 1,741<br>92.9% | ✓                                |    |
| Block Group 1, Census Tract 8038.03 | 1,716      | 148<br>8.6%    | 1,336<br>77.9%            | 0<br>0.0%                  | 41<br>2.4% | 20<br>1.2%        | 171<br>10.0% | 1,568<br>91.4% | ✓                                |    |



**Table 6-1: Environmental Justice Populations - Minority**

| Block Group                         | Population | White        | African-American or Black | Asian and Pacific Islander | Other      | Two or More Races | Hispanic       | Total Minority  | Environmental Justice Population |    |
|-------------------------------------|------------|--------------|---------------------------|----------------------------|------------|-------------------|----------------|-----------------|----------------------------------|----|
|                                     |            |              |                           |                            |            |                   |                |                 | Yes                              | No |
| Block Group 2, Census Tract 8038.03 | 1,773      | 283<br>16.0% | 1,124<br>63.4%            | 42<br>2.4%                 | 89<br>5.0% | 66<br>3.7%        | 169<br>9.5%    | 1,490<br>84.0%  | ✓                                |    |
| Block Group 3, Census Tract 8038.03 | 1,783      | 314<br>17.6% | 1,198<br>67.2%            | 117<br>6.6%                | 0<br>0.0%  | 22<br>1.2%        | 132<br>7.4%    | 1,469<br>82.4%  | ✓                                |    |
| Block Group 1, Census Tract 8055    | 2,045      | 94<br>4.6%   | 1,279<br>62.5%            | 39<br>1.9%                 | 19<br>0.9% | 88<br>4.3%        | 526<br>25.7%   | 1,951<br>95.4%  | ✓                                |    |
| Block Group 2, Census Tract 8055    | 2,156      | 387<br>17.9% | 711<br>33.0%              | 140<br>6.5%                | 32<br>1.5% | 5<br>0.2%         | 881<br>40.9%   | 1,769<br>82.1%  | ✓                                |    |
| Block Group 1, Census Tract 8056.01 | 1,948      | 105<br>5.4%  | 151<br>7.8%               | 0<br>0.0%                  | 0<br>0.0%  | 0<br>0.0%         | 1,692<br>86.9% | 1,843<br>94.6%  | ✓                                |    |
| Block Group 2, Census Tract 8056.01 | 924        | 37<br>4.0%   | 178<br>19.3%              | 0<br>0.0%                  | 0<br>0.0%  | 14<br>1.5%        | 695<br>75.2%   | 887<br>96.0%    | ✓                                |    |
| Block Group 3, Census Tract 8056.01 | 1,241      | 0<br>0.0%    | 101<br>8.1%               | 0<br>0.0%                  | 0<br>0.0%  | 8<br>0.6%         | 1,132<br>91.2% | 1,241<br>100.0% | ✓                                |    |
| Block Group 4, Census Tract 8056.01 | 1,556      | 91<br>5.8%   | 353<br>22.7%              | 90<br>5.8%                 | 0<br>0.0%  | 23<br>1.5%        | 999<br>64.2%   | 1,465<br>94.2%  | ✓                                |    |
| Block Group 1, Census Tract 8056.02 | 4,130      | 121<br>2.9%  | 683<br>16.5%              | 97<br>2.3%                 | 0<br>0.0%  | 97<br>2.3%        | 3,132<br>75.8% | 4,009<br>97.1%  | ✓                                |    |
| Block Group 2, Census Tract 8056.02 | 830        | 34<br>4.1%   | 522<br>62.9%              | 0<br>0.0%                  | 0<br>0.0%  | 33<br>4.0%        | 241<br>29.0%   | 796<br>95.9%    | ✓                                |    |
| Block Group 3, Census Tract 8056.02 | 182        | 0<br>0.0%    | 128<br>70.3%              | 0<br>0.0%                  | 0<br>0.0%  | 0<br>0.0%         | 54<br>29.7%    | 182<br>100.0%   | ✓                                |    |
| Block Group 1, Census Tract 8057    | 1,477      | 184<br>12.5% | 613<br>41.5%              | 31<br>2.1%                 | 0<br>0.0%  | 210<br>14.2%      | 439<br>29.7%   | 1,293<br>87.5%  | ✓                                |    |
| Block Group 3, Census Tract 8057    | 2,261      | 198<br>8.8%  | 814<br>36.0%              | 97<br>4.3%                 | 0<br>0.0%  | 75<br>3.3%        | 1,077<br>47.6% | 2,063<br>91.2%  | ✓                                |    |
| Block Group 1, Census Tract 8058.01 | 2,081      | 284<br>13.6% | 940<br>45.2%              | 90<br>4.3%                 | 0<br>0.0%  | 109<br>5.2%       | 658<br>31.6%   | 1,797<br>86.4%  | ✓                                |    |



**Table 6-1: Environmental Justice Populations - Minority**

| Block Group                         | Population | White          | African-American or Black | Asian and Pacific Islander | Other      | Two or More Races | Hispanic       | Total Minority | Environmental Justice Population |    |
|-------------------------------------|------------|----------------|---------------------------|----------------------------|------------|-------------------|----------------|----------------|----------------------------------|----|
|                                     |            |                |                           |                            |            |                   |                |                | Yes                              | No |
| Block Group 2, Census Tract 8058.01 | 1,760      | 183<br>10.4%   | 815<br>46.3%              | 213<br>12.1%               | 5<br>0.3%  | 24<br>1.4%        | 520<br>29.5%   | 1,577<br>89.6% | ✓                                |    |
| Block Group 1, Census Tract 8058.02 | 2,184      | 239<br>10.9%   | 757<br>34.7%              | 141<br>6.5%                | 28<br>1.3% | 103<br>4.7%       | 916<br>41.9%   | 1,945<br>89.1% | ✓                                |    |
| Block Group 1, Census Tract 8059.01 | 1,433      | 710<br>49.5%   | 169<br>11.8%              | 412<br>28.8%               | 0<br>0.0%  | 9<br>0.6%         | 133<br>9.3%    | 723<br>50.5%   | ✓                                |    |
| Block Group 1, Census Tract 8059.04 | 2,005      | 629<br>31.4%   | 636<br>31.7%              | 81<br>4.0%                 | 22<br>1.1% | 94<br>4.7%        | 543<br>27.1%   | 1,376<br>68.6% | ✓                                |    |
| Block Group 1, Census Tract 8064    | 1,087      | 729<br>67.1%   | 63<br>5.8%                | 202<br>18.6%               | 0<br>0.0%  | 33<br>3.0%        | 60<br>5.5%     | 358<br>32.9%   |                                  | ✓  |
| Block Group 2, Census Tract 8065.01 | 855        | 392<br>45.8%   | 239<br>28.0%              | 78<br>9.1%                 | 1<br>0.1%  | 2<br>0.2%         | 143<br>16.7%   | 463<br>54.2%   | ✓                                |    |
| Block Group 3, Census Tract 8065.01 | 2,854      | 244<br>8.5%    | 1,235<br>43.3%            | 36<br>1.3%                 | 10<br>0.4% | 46<br>1.6%        | 1,283<br>45.0% | 2,610<br>91.5% | ✓                                |    |
| Block Group 1, Census Tract 8066.01 | 1,117      | 380<br>34.0%   | 611<br>54.7%              | 24<br>2.1%                 | 0<br>0.0%  | 51<br>4.6%        | 51<br>4.6%     | 737<br>66.0%   | ✓                                |    |
| Block Group 2, Census Tract 8066.01 | 3,177      | 233<br>7.3%    | 1,367<br>43.0%            | 0<br>0.0%                  | 22<br>0.7% | 30<br>0.9%        | 1,525<br>48.0% | 2,944<br>92.7% | ✓                                |    |
| Block Group 1, Census Tract 8066.02 | 3,648      | 660<br>18.1%   | 2,326<br>63.8%            | 137<br>3.8%                | 39<br>1.1% | 30<br>0.8%        | 456<br>12.5%   | 2,988<br>81.9% | ✓                                |    |
| Block Group 2, Census Tract 8066.02 | 774        | 232<br>30.0%   | 110<br>14.2%              | 118<br>15.2%               | 0<br>0.0%  | 69<br>8.9%        | 245<br>31.7%   | 542<br>70.0%   | ✓                                |    |
| Block Group 3, Census Tract 8070    | 774        | 381<br>49.2%   | 285<br>36.8%              | 66<br>8.5%                 | 0<br>0.0%  | 17<br>2.2%        | 25<br>3.2%     | 393<br>50.8%   | ✓                                |    |
| Block Group 4, Census Tract 8070    | 1,689      | 1,107<br>65.5% | 285<br>16.9%              | 194<br>11.5%               | 0<br>0.0%  | 28<br>1.7%        | 75<br>4.4%     | 582<br>34.5%   | ✓                                |    |
| Block Group 1, Census Tract 8071.02 | 1,030      | 859<br>83.4%   | 39<br>3.8%                | 65<br>6.3%                 | 0<br>0.0%  | 8<br>0.8%         | 59<br>5.7%     | 171<br>16.6%   | ✓                                |    |



**Table 6-1: Environmental Justice Populations - Minority**

| Block Group                         | Population | White          | African-American or Black | Asian and Pacific Islander | Other       | Two or More Races | Hispanic     | Total Minority | Environmental Justice Population |    |
|-------------------------------------|------------|----------------|---------------------------|----------------------------|-------------|-------------------|--------------|----------------|----------------------------------|----|
|                                     |            |                |                           |                            |             |                   |              |                | Yes                              | No |
| Block Group 2, Census Tract 8071.02 | 1,338      | 690<br>51.6%   | 255<br>19.1%              | 165<br>12.3%               | 31<br>2.3%  | 26<br>1.9%        | 171<br>12.8% | 648<br>48.4%   |                                  | ✓  |
| Block Group 1, Census Tract 8072    | 1,313      | 895<br>68.2%   | 260<br>19.8%              | 94<br>7.2%                 | 9<br>0.7%   | 20<br>1.5%        | 35<br>2.7%   | 418<br>31.8%   | ✓                                |    |
| Block Group 2, Census Tract 8072    | 92         | 69<br>75.0%    | 0<br>0.0%                 | 0<br>0.0%                  | 23<br>25.0% | 0<br>0.0%         | 0<br>0.0%    | 23<br>25.0%    |                                  | ✓  |
| Block Group 4, Census Tract 8072    | 841        | 678<br>80.6%   | 22<br>2.6%                | 65<br>7.7%                 | 10<br>1.2%  | 42<br>5.0%        | 24<br>2.9%   | 163<br>19.4%   | ✓                                |    |
| Block Group 5, Census Tract 8072    | 102        | 102<br>100.0%  | 0<br>0.0%                 | 0<br>0.0%                  | 0<br>0.0%   | 0<br>0.0%         | 0<br>0.0%    | 0<br>0.0%      | ✓                                |    |
| Block Group 6, Census Tract 8072    | 8,506      | 5,868<br>69.0% | 1,338<br>15.7%            | 642<br>7.5%                | 27<br>0.3%  | 296<br>3.5%       | 335<br>3.9%  | 2,638<br>31.0% |                                  | ✓  |
| Study Area                          | 140,981    | 46%            | 31%                       | 6%                         | 11%         | 5%                | 24%          | 64.6%          | NA                               | NA |
| Montgomery County                   | 873,341    | 65%            | 15%                       | 11%                        | 5%          | 4%                | 12%          | 35%            | NA                               | NA |
| Prince George's County              | 801,515    | 27%            | 63%                       | 4%                         | 4%          | 3%                | 7%           | 73%            | NA                               | NA |
| Maryland                            | 5,296,486  | 64%            | 28%                       | 4%                         | 2%          | 2%                | 4%           | 36&            | NA                               | NA |

Source: U.S. Census 2000 Summary File 3 (SF-3)

Note:

Other includes individuals that identified themselves as American Indian or Alaskan, Native Hawaiian/Pacific Islander, or Some Other race.

Values are rounded to the nearest 10<sup>th</sup> of a percent and may result in slight error.

The federal government defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be of any race. Because Hispanics may be of any race, data in this report for Hispanics overlap with data for racial groups.

Poverty status is determined for all people EXCEPT institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old (American FactFinder, factfinder.census.gov).

**Table 6-2: Environmental Justice Populations – Low Income**

| Block Group                         | Number at or Below Federal Poverty Level | Percent at or Below Federal Poverty Level | Environmental Justice Threshold Area |    |
|-------------------------------------|------------------------------------------|-------------------------------------------|--------------------------------------|----|
|                                     |                                          |                                           | Yes                                  | No |
| Block Group 1, Census Tract 7017.02 | 248                                      | 13.9%                                     | ✓                                    |    |
| Block Group 1, Census Tract 7017.03 | 151                                      | 11.5%                                     |                                      | ✓  |
| Block Group 3, Census Tract 7017.03 | 112                                      | 9.0%                                      |                                      | ✓  |
| Block Group 1, Census Tract 7019    | 432                                      | 26.6%                                     | ✓                                    |    |
| Block Group 2, Census Tract 7019    | 78                                       | 11.0%                                     |                                      | ✓  |
| Block Group 1, Census Tract 7020    | 443                                      | 21.2%                                     | ✓                                    |    |
| Block Group 2, Census Tract 7020    | 73                                       | 6.5%                                      |                                      | ✓  |
| Block Group 3, Census Tract 7020    | 202                                      | 10.0%                                     |                                      | ✓  |
| Block Group 1, Census Tract 7021.01 | 457                                      | 15.8%                                     | ✓                                    |    |
| Block Group 2, Census Tract 7021.01 | 140                                      | 11.7%                                     | ✓                                    |    |
| Block Group 3, Census Tract 7022    | 171                                      | 10.3%                                     |                                      | ✓  |
| Block Group 4, Census Tract 7022    | 0                                        | 0.0%                                      |                                      | ✓  |
| Block Group 1, Census Tract 7023.01 | 197                                      | 13.4%                                     | ✓                                    |    |
| Block Group 2, Census Tract 7023.01 | 200                                      | 8.7%                                      |                                      | ✓  |
| Block Group 2, Census Tract 7023.02 | 253                                      | 13.0%                                     | ✓                                    |    |
| Block Group 3, Census Tract 7023.02 | 203                                      | 15.1%                                     | ✓                                    |    |
| Block Group 1, Census Tract 7024.01 | 88                                       | 10.7%                                     |                                      | ✓  |
| Block Group 2, Census Tract 7024.01 | 136                                      | 8.0%                                      |                                      | ✓  |
| Block Group 1, Census Tract 7024.02 | 93                                       | 6.9%                                      |                                      | ✓  |
| Block Group 2, Census Tract 7024.02 | 108                                      | 10.3%                                     |                                      | ✓  |
| Block Group 3, Census Tract 7024.02 | 179                                      | 8.1%                                      |                                      | ✓  |
| Block Group 1, Census Tract 7025    | 27                                       | 2.6%                                      |                                      | ✓  |
| Block Group 2, Census Tract 7025    | 308                                      | 19.6%                                     | ✓                                    |    |
| Block Group 1, Census Tract 7026.01 | 196                                      | 7.0%                                      |                                      | ✓  |
| Block Group 2, Census Tract 7026.01 | 17                                       | 2.9%                                      |                                      | ✓  |
| Block Group 3, Census Tract 7026.01 | 117                                      | 14.0%                                     | ✓                                    |    |
| Block Group 2, Census Tract 7026.02 | 357                                      | 11.3%                                     | ✓                                    |    |
| Block Group 1, Census Tract 7027    | 106                                      | 8.6%                                      |                                      | ✓  |
| Block Group 2, Census Tract 7027    | 272                                      | 9.6%                                      |                                      | ✓  |
| Block Group 3, Census Tract 7027    | 94                                       | 6.5%                                      |                                      | ✓  |
| Block Group 2, Census Tract 7028    | 9                                        | 1.1%                                      |                                      | ✓  |
| Block Group 3, Census Tract 7028    | 255                                      | 9.5%                                      | ✓                                    |    |
| Block Group 4, Census Tract 7029    | 46                                       | 4.3%                                      |                                      | ✓  |
| Block Group 5, Census Tract 7029    | 0                                        | 0.0%                                      |                                      | ✓  |
| Block Group 1, Census Tract 7047    | 0                                        | 0.0%                                      |                                      | ✓  |
| Block Group 2, Census Tract 7047    | 41                                       | 5.3%                                      |                                      | ✓  |
| Block Group 1, Census Tract 7048.01 | 97                                       | 6.7%                                      |                                      | ✓  |
| Block Group 2, Census Tract 7048.01 | 229                                      | 11.6%                                     |                                      | ✓  |
| Block Group 1, Census Tract 7048.02 | 60                                       | 6.8%                                      |                                      | ✓  |
| Block Group 2, Census Tract 7048.02 | 91                                       | 6.2%                                      |                                      | ✓  |



**Table 6-2: Environmental Justice Populations – Low Income**

| Block Group                         | Number at or Below Federal Poverty Level | Percent at or Below Federal Poverty Level | Environmental Justice Threshold Area |    |
|-------------------------------------|------------------------------------------|-------------------------------------------|--------------------------------------|----|
|                                     |                                          |                                           | Yes                                  | No |
| Block Group 1, Census Tract 7050    | 47                                       | 2.3%                                      |                                      | ✓  |
| Block Group 2, Census Tract 7050    | 28                                       | 4.4%                                      |                                      | ✓  |
| Block Group 3, Census Tract 7050    | 10                                       | 1.3%                                      |                                      | ✓  |
| Block Group 4, Census Tract 7050    | 20                                       | 3.2%                                      |                                      | ✓  |
| Block Group 5, Census Tract 7050    | 40                                       | 32.5%                                     | ✓                                    |    |
| Block Group 1, Census Tract 7051    | 38                                       | 2.6%                                      |                                      | ✓  |
| Block Group 2, Census Tract 7051    | 31                                       | 1.6%                                      |                                      | ✓  |
| Block Group 1, Census Tract 7054    | 4                                        | 0.6%                                      |                                      | ✓  |
| Block Group 2, Census Tract 7054    | 17                                       | 1.8%                                      |                                      | ✓  |
| Block Group 3, Census Tract 7054    | 35                                       | 3.1%                                      |                                      | ✓  |
| Block Group 2, Census Tract 8036.02 | 157                                      | 16.6%                                     | ✓                                    |    |
| Block Group 3, Census Tract 8036.05 | 75                                       | 6.4%                                      |                                      | ✓  |
| Block Group 1, Census Tract 8036.12 | 119                                      | 9.7%                                      |                                      | ✓  |
| Block Group 1, Census Tract 8036.13 | 6                                        | 0.5%                                      |                                      | ✓  |
| Block Group 2, Census Tract 8036.13 | 332                                      | 17.7%                                     | ✓                                    |    |
| Block Group 1, Census Tract 8038.03 | 129                                      | 7.6%                                      |                                      | ✓  |
| Block Group 2, Census Tract 8038.03 | 160                                      | 9.0%                                      |                                      | ✓  |
| Block Group 3, Census Tract 8038.03 | 141                                      | 8.0%                                      |                                      | ✓  |
| Block Group 1, Census Tract 8055    | 227                                      | 11.1%                                     |                                      | ✓  |
| Block Group 2, Census Tract 8055    | 176                                      | 8.2%                                      |                                      | ✓  |
| Block Group 1, Census Tract 8056.01 | 255                                      | 13.3%                                     | ✓                                    |    |
| Block Group 2, Census Tract 8056.01 | 156                                      | 17.4%                                     | ✓                                    |    |
| Block Group 3, Census Tract 8056.01 | 168                                      | 13.5%                                     | ✓                                    |    |
| Block Group 4, Census Tract 8056.01 | 169                                      | 11.0%                                     |                                      | ✓  |
| Block Group 1, Census Tract 8056.02 | 986                                      | 24.2%                                     | ✓                                    |    |
| Block Group 2, Census Tract 8056.02 | 205                                      | 24.7%                                     | ✓                                    |    |
| Block Group 3, Census Tract 8056.02 | 20                                       | 11.0%                                     |                                      | ✓  |
| Block Group 1, Census Tract 8057    | 255                                      | 17.7%                                     | ✓                                    |    |
| Block Group 3, Census Tract 8057    | 364                                      | 16.2%                                     | ✓                                    |    |
| Block Group 1, Census Tract 8058.01 | 152                                      | 7.4%                                      |                                      | ✓  |
| Block Group 2, Census Tract 8058.01 | 111                                      | 6.3%                                      |                                      | ✓  |
| Block Group 1, Census Tract 8058.02 | 96                                       | 4.4%                                      |                                      | ✓  |
| Block Group 1, Census Tract 8059.01 | 224                                      | 15.6%                                     | ✓                                    |    |
| Block Group 1, Census Tract 8059.04 | 131                                      | 6.5%                                      |                                      | ✓  |
| Block Group 1, Census Tract 8064    | 90                                       | 8.3%                                      |                                      | ✓  |
| Block Group 2, Census Tract 8065.01 | 126                                      | 15.3%                                     | ✓                                    |    |
| Block Group 3, Census Tract 8065.01 | 417                                      | 14.8%                                     | ✓                                    |    |
| Block Group 1, Census Tract 8066.01 | 60                                       | 5.4%                                      |                                      | ✓  |
| Block Group 2, Census Tract 8066.01 | 609                                      | 19.2%                                     | ✓                                    |    |

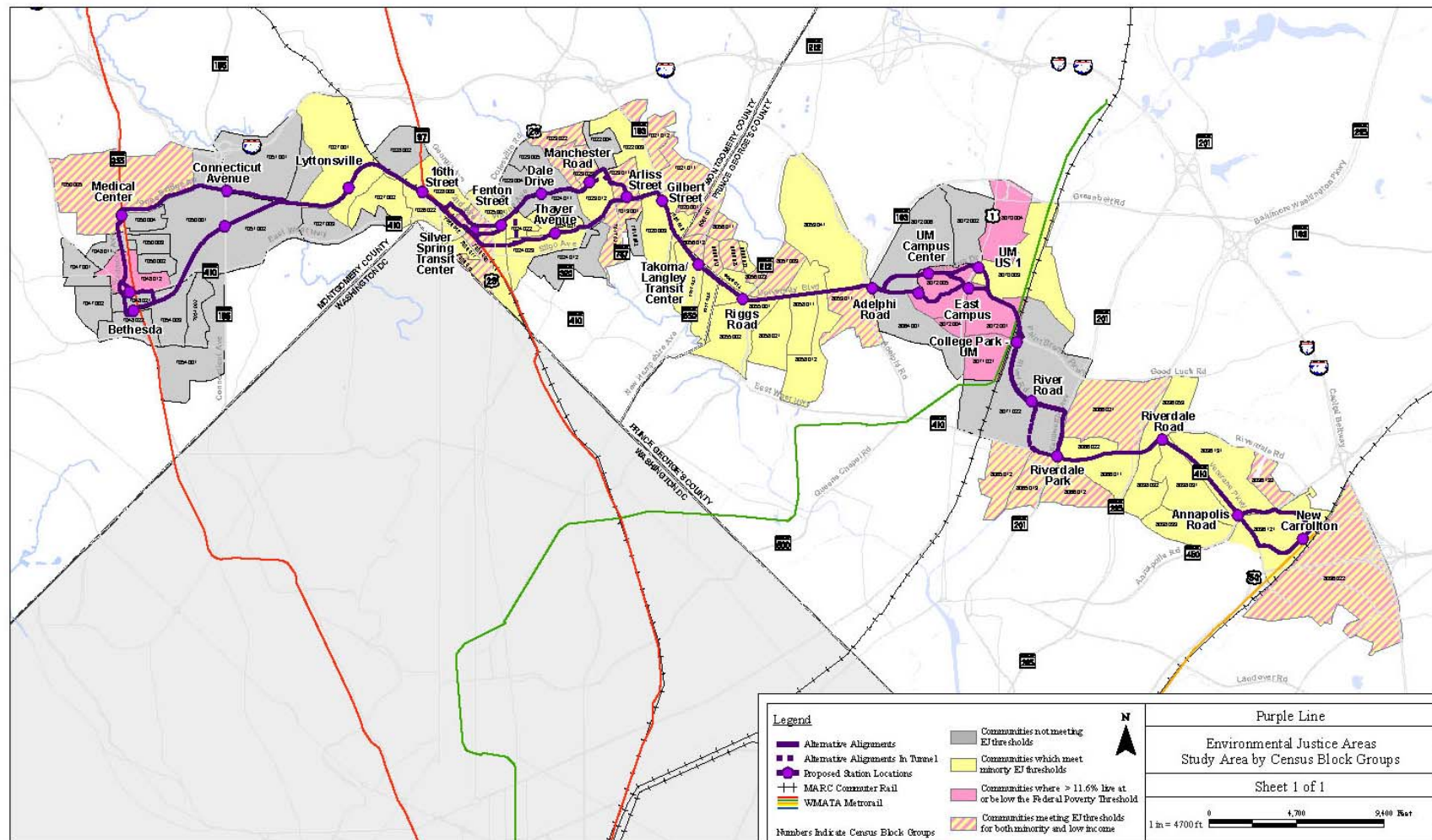
**Table 6-2: Environmental Justice Populations – Low Income**

| Block Group                         | Number at or Below Federal Poverty Level | Percent at or Below Federal Poverty Level | Environmental Justice Threshold Area |    |
|-------------------------------------|------------------------------------------|-------------------------------------------|--------------------------------------|----|
|                                     |                                          |                                           | Yes                                  | No |
| Block Group 1, Census Tract 8066.02 | 485                                      | 13.6%                                     | ✓                                    |    |
| Block Group 2, Census Tract 8066.02 | 21                                       | 2.7%                                      |                                      | ✓  |
| Block Group 3, Census Tract 8070    | 63                                       | 8.1%                                      |                                      | ✓  |
| Block Group 4, Census Tract 8070    | 764                                      | 45.2%                                     | ✓                                    |    |
| Block Group 1, Census Tract 8071.02 | 124                                      | 12.0%                                     | ✓                                    |    |
| Block Group 2, Census Tract 8071.02 | 76                                       | 5.7%                                      |                                      | ✓  |
| Block Group 1, Census Tract 8072    | 551                                      | 49.4%                                     | ✓                                    |    |
| Block Group 2, Census Tract 8072    | 0                                        | 0.0%                                      |                                      | ✓  |
| Block Group 4, Census Tract 8072    | 477                                      | 57.3%                                     | ✓                                    |    |
| Block Group 5, Census Tract 8072    | 102                                      | 100.0%                                    | ✓                                    |    |
| Block Group 6, Census Tract 8072    | 0                                        | 0.0%                                      |                                      | ✓  |
| Study Area                          | 15,340                                   | 11.6%                                     | NA                                   | NA |
| Montgomery County                   | 47,024                                   | 5.4%                                      | NA                                   | NA |
| Prince George's County              | 60,196                                   | 7.7%                                      | NA                                   | NA |
| Maryland                            | 438,676                                  | 8.5%                                      | NA                                   | NA |

Source: U.S. Census 2000 Summary File 3 (SF-3)

Notes:

- Values are rounded to the nearest 10<sup>th</sup> of a percent
- Minority persons include Hispanic individuals who can be of any race.
- Poverty status is determined for all people EXCEPT institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old



**FIGURE 6-1: ENVIRONMENTAL JUSTICE AREAS**



### National Center for Educational Statistics (NCES)

NCES provides relatively recent demographic information for the public school student population for corridor schools. Its 2004-2005 Common Core of Data provides racial composition of the student populations, and the number of students eligible for free or reduced lunches for each public school. Elementary schools were identified as being most representative of their surrounding area because they have set boundaries and encompass the smallest possible geographic area. In general, the data from NCES was consistent with the U.S. Census 2000 data.

### Government Assisted Housing Programs

In the study area, the U.S. Department of Housing and Urban Development (HUD), the Maryland Department of Housing and Community Development (DHCD), the Housing Opportunities Commission (HOC) of Montgomery County, and the Prince George's County Housing Authority, provide housing assistance for low-income persons. Locations of public housing complexes and public and private complexes that readily accept Section 8<sup>7</sup> and other forms of rental assistance were provided by HUD, DHCD, and HOC (See Table 6-3). In general, the locations of subsidized housing complexes were in block groups that met the criteria for a low-income population. The table does not include the many scattered sites, usually privately owned single rental units, which are located throughout the study area.

**Table 6-3: Subsidized and Section 8 Housing in the Study Area**

| Neighborhood                                   | Block Group | Property                          | Address                     |
|------------------------------------------------|-------------|-----------------------------------|-----------------------------|
| Bethesda                                       | 7048.01, 2  | Waverly House                     | 4521 East West Highway      |
| Chevy Chase                                    | 7051, 2     | Chevy Chase Lake                  | 3719 Chevy Chase Lake Drive |
| Rock Creek/<br>Lyttonsville/<br>Rosemary Hills | 7027, 2     | Paddington Square Apartments      | 8800 Lanier Drive           |
|                                                | 7027, 1     | Friendly Gardens                  | 2423 Lyttonsville Road      |
|                                                | 7026.02, 2  | The Barrington Apartments         | 1912-16 Rosemary Hill Drive |
| Silver Spring                                  | 7025, 2     | Alexander House                   | 8560 Second Avenue          |
|                                                | 7025, 2     | Elizabeth House                   | 1400 Fenwick Avenue         |
|                                                | 7025, 1     | Montgomery Arms                   | 8627 Fenton Street          |
|                                                | 7029, 4     | Springvale Terrace                | 8505 Springvale Road        |
|                                                | 7026.01, 3  | Spring Garden                     | 8007 Eastern Avenue         |
|                                                | 7025, 1     | Jesup-Blair                       | 900 Jesup-Blair Drive       |
| East Silver Spring                             | 7023.02, 3  | Tanglewood/Sligo Hills Apartments | 8902 Manchester Road        |
| Long Branch                                    | 7023.01, 2  | Manchester Manor                  | 8401 Manchester Road        |
| Takoma Park                                    | 7017.02, 1  | Youth in Transition               | 8210 Houston Court          |
|                                                |             | Greenwood Terrace                 | 8502 Greenwood Avenue       |
| Langley Park                                   | 7020, 2     | Park Montgomery                   | 8860 Piney Branch Road      |

<sup>7</sup> Section 8 includes several federally funded rental assistance programs. These programs pay landlords the amount equal to the difference between 30 percent of the tenant's adjusted income (or 10 percent of the gross income or the portion of welfare assistance designated for housing) – U.S. Department of Housing and Urban Development website.



**Table 6-3: Subsidized and Section 8 Housing in the Study Area**

| Neighborhood | Block Group | Property                    | Address                |
|--------------|-------------|-----------------------------|------------------------|
| College Park | 8072, 1     | New Alden-Berkley Townhomes | 4954 Lakeland Road     |
|              | 8072, 1     | Spellman House              | 4711 Berwyn House Road |
| Riverdale    | 8036.13, 1  | Auburn Manor                | 6821 Riverdale Road    |

*Source: U.S. Department of Housing and Urban Development (HUD), the Maryland Department of Housing and Community Development (DHCD), the Housing Opportunities Commission (HOC) of Montgomery County, and the Prince George's County Housing Authority*

### **CASA de Maryland**

CASA de Maryland (CASA) is a Latino and immigrant-based service and advocacy organization. CASA operates one day-laborer site in the corridor on University Boulevard near Gilbert Street and plans to open a second at the corner of University Boulevard and New Hampshire Avenue to serve the large number of local residents who are employed in this industry. These locations are consistent with U.S. Census data and information gathered from local planners.

## **6.4. Effects on Minority and Low Income Populations**

### **6.4.1. Environmental Justice Disproportional Effects Analysis**

The majority of the census tracts in the corridor contain environmental justice populations. A map analysis was conducted to identify whether environmental effects would be disproportionately high and adverse for these populations. Based on the results of technical studies conducted for this project, the physical locations of potential adverse impacts were identified and these locations were analyzed to determine whether patterns or concentrations of adverse effects occurred in these areas.

Tables were prepared to identify the impacts for each of the Build Alternatives by block group and resource. The neighborhood, block group, environmental justice status, and type of impact are identified for each. How each resource would be impacted per block group by alternative is identified. The tables distinguish between the impacts to environmental justice populations and non-environmental justice populations.

The adverse effects of the No Build Alternative, such as increasing congestion and travel time, would be similar for all communities, regardless of race or income. The No Build Alternative would not entail any changes to the physical environment, such as displacements or loss of resources. Therefore, high and disproportionately adverse effects to minority or low-income communities are not anticipated for the No Build Alternative.

The TSM alternative would improve transit service for all communities in the corridor, and like the No Build, would cause no displacements or loss of resources. Therefore the TSM would not have high or disproportionately adverse effects to minority or low-income communities.



The location and magnitude of effects associated with the Build Alternatives were examined to understand the potential for high and disproportionate adverse effects on environmental justice populations. The adverse effects of the Build Alternatives are not disproportionately located in environmental justice communities.

At this point in the project planning phase, it is not anticipated that any block group or groups containing environmental justice populations, would suffer disproportionately high and adverse impacts because of the operation of the Purple Line. Potential impacts to environmental justice populations, and the population of the study area as a whole, should continue to be investigated, and where appropriate, minimized or mitigated throughout the remainder of the planning and any future design and construction phases of the Purple Line project.

### **Visual Quality**

Substantial effects to visual quality are anticipated along the Georgetown Branch right-of-way for all Build Alternatives; two of the six block groups along the right-of-way meet the threshold for environmental justice. Visual effects are anticipated along the CSX right-of-way from the introduction of transit service. Additional visual effects are anticipated along Thayer Avenue and Piney Branch Avenue for the Silver Spring/Thayer Avenue design option. The communities in these areas meet environmental justice thresholds. The Preinkert/Chapel Drive design option has visual impacts but the residences in this block group are not close enough to the alignment to see it and are buffered by University buildings. The substantial adverse visual effects are not anticipated to be disproportionally experienced by environmental justice communities.

### **Air Quality**

The project is not predicted to cause or exacerbate a violation of the NAAQS. The project is not expected to measurably increase regional emission burdens or MSAT levels and is not expected to cause a violation of the PM<sub>2.5</sub> standard. A more detailed discussion is contained in the *Air Quality Technical Report*. Construction-related effects of the project would be limited to short-term increased fugitive dust and mobile-source emissions during construction. State and local regulations regarding dust control and other air quality emission reduction controls should be followed. Once a preferred alternative is selected, a quantitative construction analysis should be conducted if it is determined that the construction will last longer than five years. Air quality impacts from construction are expected to be temporary and uniform in both environmental justice areas and non-environmental justice areas throughout the corridor.

### **Noise and Vibration**

Operation activities for each of the BRT alternatives are anticipated to result in moderate noise impacts. These moderate impacts are clustered in Montgomery County in the general area of Silver Spring along a section of the existing Metrorail, and along a portion of Wayne Avenue ending at Arliss Street, both of which include environmental justice populations.

Both maintenance and storage facilities are located in environmental justice areas. BRT activities would result in moderate noise impact to the Lyttonsville site. Severe noise impacts resulting from LRT activities are anticipated at the Glenridge site. These noise impacts can be



minimized or mitigated and measures for minimization and mitigation will be identified should a Build alternative be selected. Communities that meet environmental justice thresholds are not anticipated to have disproportionate adverse noise impacts.

Vibration impacts projected under the BRT and LRT alternatives are anticipated along the Georgetown Branch right-of-way in areas which do not meet environmental justice thresholds. A more detailed discussion is contained in the *Noise and Vibration Technical Report*.

### **Safety**

The streets along which the TSM, BRT, and LRT alternatives would operate already have bus operations, the types of conflicts among traffic, transit, and pedestrians under any alternative would be similar to conditions existing today. The number of buses would be comparable to, or slightly less than those on the streets with transit improvements, the potential for conflicts would be similar to that currently experienced and similar to that for the No Build. Traffic and transit controls as well as pedestrian safety strategies would be used to manage any potential conflicting movements. The proposed transitway would be designed to be compatible with the safe and secure use of trails, as has been the experience for similar facilities elsewhere. The type of construction activities for the BRT and LRT alternatives would be very similar to typical street and Metrorail construction methods used today and would not introduce any unusual risks.

Safety conditions under the TSM and Build alternatives are expected to be uniform throughout the corridor, and would not disproportionately adversely affect environmental justice communities.

Construction of the proposed improvements will not involve any unusual or particularly dangerous construction methods, procedures, or locations that would pose any substantial safety or security effects. Public safety, involving design and engineering of the transportation facilities and the type of materials used, is addressed by state and local building codes.

### **Relocations and Displacements**

A limited number of residential displacements are anticipated from the Purple Line. The Low Investment BRT has one displacement in a non-environmental justice area, and two in an environmental justice area. All the other anticipated displacements are in environmental justice areas, along the CSX corridor and in the East Silver Spring/Long Branch area. The total number of displacements is low, ranging from three for Low Investment BRT, five for Medium Investment BRT, 14 for High Investment BRT, twelve for the BRT Silver Spring/Thayer Avenue design option, and seven for Low and Medium Investment LRT and 14 for High Investment LRT and twelve for the LRT Silver Spring/Thayer Avenue design option.

Careful efforts were made in project planning and engineering to avoid residential displacements where possible. Some alignments, such as Riverdale Road between Veterans Parkway and Annapolis road were dropped in part because of the extent of residential displacements that would have been required. Many of these dropped alignments were in environmental justice areas. While the majority of the residential displacements are in environmental justice areas; the

majority of the communities in the corridor are environmental justice areas and the overall number of displacements is very low. For this reason these displacements are not considered a disproportionately high or adverse impact.

Some business displacements are anticipated under each of the Purple Line Build Alternatives. Low Investment BRT is anticipated to displace two business properties. The largest number would be under the High Investment LRT which is anticipated to displace between 16 and 19 business properties. All of the business properties are located in environmental justice areas. However most of the commercial areas in the corridor are environmental justice areas and the total number of business displacements are low. For this reason displacements are not considered a disproportionately high or adverse impact.

### **Parks**

There are 50 parklands and recreational areas in the Purple Line corridor. A detailed discussion on parks and Section 4(f) properties is contained in the Preliminary Draft Section 4(f) Evaluation Technical Report.

The development of early resource inventories and conceptual engineering activities to keep the Purple Line alignments within public transportation rights-of-way, as much as possible, helped to avoid and/or minimize the impacts on many of the parklands/Section 4(f) resources. *De minimis* use of publicly-owned parks and recreational areas are defined as those that do not “adversely affect the activities, features and attributes” of the Section 4(f) resource. MTA intends to pursue a finding of *de minimis* impact for the parks and recreational areas in the corridor that have potential impacts from the Build Alternatives.

The No Build and TSM Alternatives are not anticipated to affect parklands. The Build Alternatives are anticipated to potentially require right-of-way from 11 public parklands, five recreational trails, and five public school properties. Potential impacts to public parklands and recreational areas by the project are minor and do not “adversely affect the activities, features and attributes” of the resources present in the area.

Subsequent engineering activities would seek to further reduce impacts whenever practical.

The parklands and recreation areas in environmental justice communities or directly adjacent to environmental justice communities include:

#### Parks:

1. Sligo Creek Stream Valley Park, Unit 2
2. Long Branch Local Park
3. New Hampshire Estates Neighborhood Park
4. Adelphi Manor Community Recreation Center
5. Northwest Stream Valley Park
6. University Hills Neighborhood Park



7. Anacostia River Stream Valley Park
8. Prince George's County Park Police Headquarters
9. West Lanham Hills Neighborhood Recreation Center

Recreational Trails:

1. Sligo Creek Trail
2. Northwest Branch Trail
3. Paint Branch Trail

Public Schools:

1. East Silver Spring Elementary School
2. Rosemary Hills Elementary School
3. University of Maryland

Parkland impacts are not anticipated to have a disproportionate adverse impact to environmental justice communities.

### **Cultural Resources**

The No Build and TSM alternatives are not anticipated to effect cultural resources in the Purple Line corridor. An adverse impact to one historic structure is anticipated from the all of the Build alternatives, except the Low Investment BRT. This structure is the Falklands Apartments, which is located in a block group that meets the threshold for environmental justice. The residents of the impacted apartments have not been identified. Should a Build alternative be selected as the Locally Preferred Alternative a more detailed evaluation of potential impacts would be developed and a Memorandum of Agreement between MTA and MHT prepared. A more detailed discussion is contained in the *Architectural History Technical Report*.

Impacts to cultural resources are not anticipated to have a disproportionate adverse impact to environmental justice communities.

#### **6.4.2. Denial of Benefits**

In an effort to assess the potential for the possible denial of benefits to environmental justice populations by the construction and operation of the proposed transit system, an analysis was completed to address location and access. It has been determined that the key benefits of the Purple Line are improved mobility and travel time to locations along the corridor and the provision of connectivity to other transit services and systems.

The Purple Line would provide accessibility to locations throughout the project corridor and to the Metrorail, MARC and Amtrak systems. The Purple Line station locations were selected based upon the density of residential development, activity centers, and creation of transfer points to other transit services. These locations are evenly distributed along the corridor and serve all populations, including environmental justice populations equally. Therefore, it is not



anticipated that environmental justice populations will be denied the benefits of the proposed Purple Line.

Additionally, pedestrian enhancements to sidewalks, paths, and crosswalks would be constructed at various locations as part of the overall project. These enhancements would provide safer street crossings and improve access to several trails located within the corridor for pedestrians and bicyclists. Several of these proposed enhancements would be in areas that meet the environmental justice thresholds or that have environmental justice populations residing in those block groups. Therefore, it is not anticipated that environmental justice populations would be denied the benefits of the proposed Purple Line.

#### ***6.4.3. Public Outreach in the Environmental Justice Process***

Full and fair access to “meaningful” involvement by minority and low-income populations in project planning and development is an important aspect of environmental justice. Ensuring full and fair access means actively seeking the input and participation from those typically under-represented groups throughout all the project stages. Residents can provide important information on community concerns, special sites, and unusual traffic, pedestrian or employment patterns in the corridor. This information can be used in the design and evaluation of alternatives, to avoid negative impacts to valued sites, and to support the development of safe, practical, and attractive transportation options that are responsive to the concerns of environmental justice communities.

The project’s public outreach program provided numerous ways to receive information and provide comments. Outreach included project newsletters, fact sheets and flyers, a project website, public meetings, community meetings, letters, and email. Meeting notices and newsletters were distributed to a group that grew from approximately 16,000 individuals and businesses at the time of the scoping meetings to more than 60,000 stakeholders.

Public meetings were held throughout the project to share and gain information from the community. The public meetings were held in an open house format where participants conducted self-paced reviews of project information and displays. MTA representatives were available to answer questions.

Five rounds of public meetings were conducted for the project, beginning with the initial project scoping in September 2003 and concluding with overall end-to-end Build Alternatives meetings in May 2008. Each round of open house meetings included four or five meeting dates held in locations throughout the corridor allowing the public to choose the date and location most convenient for them. Meetings were announced through mass mailings, mainstream and minority focused radio stations and newspapers, and notification to community associations.

In an effort to gain a local perspective on the project, MTA formed eight Community Focus Groups along the corridor. Initially seven groups were identified, but ultimately eight groups were formed when it became clear that the Silver Spring Community Focus Group should be divided into Downtown and East Silver Spring Community Focus Groups.



The eight Community Focus Groups were:

- Master Plan
- Jones Bridge Road
- Lyttonsville/CSX Corridor
- Downtown Silver Spring
- East Silver Spring
- University Boulevard
- University of Maryland/College Park/Riverdale Park
- New Carrollton

These groups were composed of representatives of the local community and civic organizations. Recognizing that environmental justice populations are often underrepresented in the project planning process, the MTA expanded the outreach to include local religious leaders, local schools, and parent teacher associations; and worked with local community planners to identify and invite leaders of local minority-owned business groups, and advocacy groups.

These geographically organized groups held multiple rounds of meetings with local community representatives that helped facilitate open discussions on issues specific to one community or to a portion of the corridor. Community representatives provided valuable insight and input on the development and evaluation of alternatives. The MTA has gained valuable information ranging from such things as the details of the traffic circulation of local school buses, to double parking by delivery vans on narrow commercial streets. This information allowed the MTA to better design the project and develop plans to address community concerns. Modifications were made to alignments, and some alignments were dropped altogether, in part due to information and input received at these meetings. Meetings were scheduled as new information became available and were also open to the general public. Community Focus Group involvement continues as the project moves forward.

Since the initial scoping meetings (excluding the open house meetings and Community Focus Group meetings), the MTA has provided over 200 additional briefings at the request of community, business, or other stakeholder groups. Outreach has included meetings with individual property owners, businesses, community associations, environmental groups, local governments, transit advocacy groups, developers, business associations, special interest groups, and other stakeholders. Briefings were generally held at the stakeholder group's request and in the format and location of their choosing, although on occasion the MTA proposed these meeting when a need for more coordination or information was identified. These included:

- Action Langley Park is a not-for-profit organization that works to improve the quality of life for residents of Langley Park and its nearby neighborhoods, as well as immigrants in suburban Maryland. Action Langley Park sponsors Langley Park Day, an annual community fair. The MTA had a table at Langley Park Day in May 2008 to inform



people about the Purple Line and solicit input on the project. This table was manned by bilingual staff.

- Impact Silver Spring is a not-for-profit organization that works to engage and empower community members with special emphasis on those communities that are traditionally under-represented in civic engagement: low income, minority, and immigrant communities. The MTA met with local community members to discuss the Purple Line and the potential benefits and impacts of the project.
- Puente Inc. is a Prince George's County association of neighbors. Puente Inc.'s mission has been to provide health education and prevention services, carry out educational symposiums that foster inter-generational leadership, advocate on behalf of policy issues affecting the Latino community, and develop programs that foster and preserve positive Latino cultural values in Prince George's County, MD. A representative of Puente attended Community Focus Group meetings
- CASA de Maryland is a Latino- and immigrant-based service and advocacy organization. CASA's primary mission is to work with the community to improve the quality of life and fight for equal treatment and full access to resources and opportunities for low-income Latinos and their families. CASA also works with other low-income immigrant communities and organizations, makes its programs and activities available to them, and advocates for social, political, and economic justice for all low-income communities.

The MTA continues to advertise its willingness to meet with any interested individual or group.

Project newsletters provided project updates and announced opportunities for public involvement. Eight newsletters have been distributed to date, providing project updates and announcements. Fact sheets and fliers, including general project information and more specific explanations of field activities, provided additional project information.

Finally, the project website has also been used to share information and get feedback. The website includes project information, mapping of the alternatives, public meeting data, and general information on the BRT and LRT Alternatives. It is updated when new information becomes available and was redesigned to be more user-friendly and to make data easier to find.

Throughout the course of the study, the MTA has used a variety of outreach methods to identify communities and/or stakeholders that may be under-represented. The MTA has worked with local jurisdictions, elected officials, business leaders, local churches, and advocacy groups to reach out to community members. At times, meeting notices were posted at libraries and local community centers and delivered to local businesses. Newsletters, fact sheets, and comment sheets have been provided in both English and Spanish, and Project Team members are available to facilitate participation by all interested parties.

Participation of low-income and minority populations in the Purple Line decision-making process has been advanced through:

- Expanded outreach to environmental justice communities to encourage attendance at, and participation in project meetings and open houses.



- Flyers delivered to homes in minority community for Community Focus Groups with low attendance.
- Direct mailing inviting residents in minority communities to Community Focus Groups where neighborhoods were not being represented.
- Invitations to Community Focus Groups sent to religious leaders of local houses of worship in environmental justice communities.
- Meetings with city and county agency staff, local elected officials, and community leaders to identify leaders of local communities; particularly those traditionally under-represented in the civic process. The groups identified included Action Langley Park, Impact Silver Spring, Puente Inc., and CASA de Maryland.
- Other community representatives identified and invited to participate in the Community Focus Group meetings were:
  - Prince George's County Latino Affairs Liaison
  - Montgomery County Department of Housing & Community Affairs
  - Montgomery County Business Development Specialist
- The translation of project newsletters and Open House announcement posters into Spanish; and distribution of newsletters, flyers, and posters to local Latino organizations and community centers.
- Providing translators at public project meetings. MTA's Outreach Manager for Washington Area Transit Programs is bilingual in Spanish and was active in outreach to the local Latino community.

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## **Appendix A**

### **Neighborhood Characteristics**







Potential socioeconomic impacts of the alternatives considered to each neighborhood identified along the Purple Line corridor are presented below.

## **A.1. Bethesda Neighborhood Characteristics**

The Bethesda neighborhood is located in Montgomery County, northwest of Washington, D.C. It is bisected by Wisconsin Avenue and is located north of Bradley Boulevard and south of Cedar Lane (see Figure 3-1). The Bethesda neighborhood boundary includes the National Institutes of Health, the National Naval Medical Center, and most of the Bethesda Central Business District (CBD). Also included are residential areas just east and west of Wisconsin Avenue.

The Bethesda neighborhood is mostly an urban mixed-use area, with moderate and high-rise multi-family residences located within and on the edges of the CBD. Bethesda has an active CBD that includes numerous offices, stores, restaurants, and bars. The CBD is also a designated Arts and Entertainment District and hosts events and festivals throughout the year. Single-family detached houses of varying ages (early twentieth century to recent infill) are located east and west of the CBD.

### ***A.1.1. Population***

In the Bethesda neighborhood, more than 80 percent of the population is White, which far exceeds the study area (46 percent) and Montgomery County (65 percent). The median annual household income is \$78,288 compared to \$51,028 for the Montgomery County portion of the study area and \$48,812 for the entire study area.



### Bethesda Demographics

| Category                                              | Neighborhood | Montgomery County Portion of the Study Area | Study Area | Montgomery County |
|-------------------------------------------------------|--------------|---------------------------------------------|------------|-------------------|
| Population                                            | 9,874        | 71,762                                      | 140,981    | 873,341           |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                             |            |                   |
| White only                                            | 81%          | 51%                                         | 46%        | 65%               |
| African-American or Black only                        | 5%           | 26%                                         | 31%        | 15%               |
| American Indian/Native Alaskan only                   | <1%          | <1%                                         | 1%         | <1%               |
| Asian                                                 | 9%           | 7%                                          | 6%         | 11%               |
| Native Hawaiian/Pacific Islander only                 | <1%          | <1%                                         | <1%        | <1%               |
| Other Race                                            | 2%           | 10%                                         | 11%        | 5%                |
| Two or More Races                                     | 2%           | 5%                                          | 5%         | 4%                |
| Hispanic Population                                   | 9%           | 20%                                         | 24%        | 12%               |
| Median Household Income                               | \$78,288     | \$51,208                                    | \$48,812   | \$71,551          |
| People Living Below Poverty                           | 7%           | 9%                                          | 12%        | 5%                |
| Linguistically Isolated Households                    | 7%           | 10%                                         | 13%        | 6%                |
| Using Public Transportation to Work                   | 25%          | 26%                                         | 21%        | 13%               |
| Households with No Vehicle Available                  | 18%          | 8%                                          | 17%        | 8%                |
| Housing Units                                         | 5,376        | 31,596                                      | 52,328     | 334,632           |
| Owner-Occupied Households                             | 30%          | 37%                                         | 40%        | 69%               |
| Renter-Occupied Households                            | 70%          | 63%                                         | 60%        | 31%               |
| Vacant Residences                                     | 5%           | 3%                                          | 4%         | 3%                |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: U.S. Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups

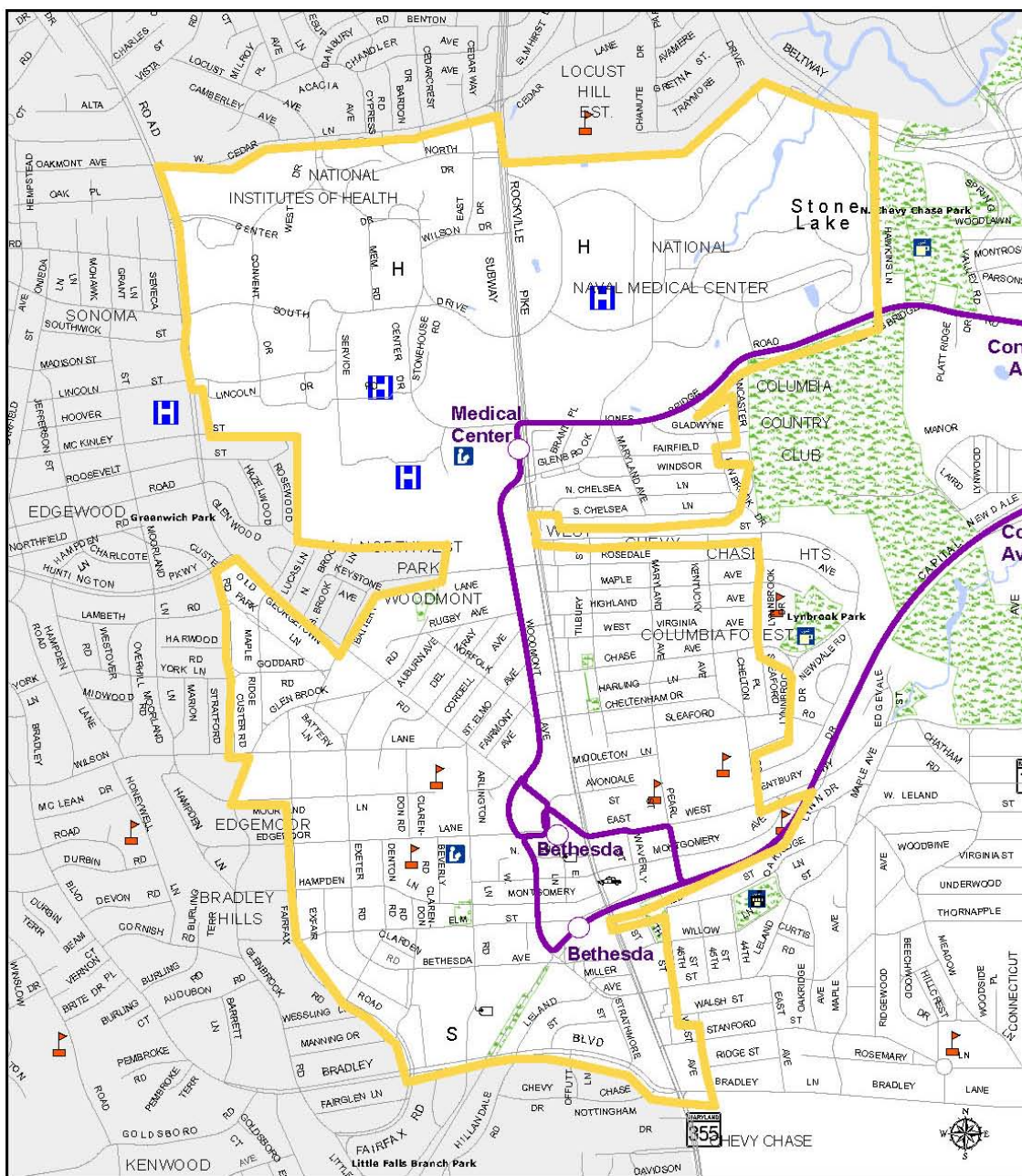
#### ***A.1.2. Housing***

The Bethesda neighborhood features moderate and high-rise multi-family residences in the CBD along Wisconsin and Woodmont Avenues, as well as single-family residences in the CBD's outlying areas. Only 30 percent of households in the neighborhood were owner-occupied, compared to 69 percent for Montgomery County.

#### ***A.1.3. Community Facilities and Services***

Several community facilities and services were identified within the Bethesda neighborhood. These facilities are listed in Table A-2 and can be found in Figure A-1.

## Bethesda Neighborhood Map



Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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### Bethesda Community Facilities

| Facility Name                            | Type of Facility      |
|------------------------------------------|-----------------------|
| Bethesda Annex                           | Emergency Services    |
| Bethesda Elementary School               | Educational           |
| Bethesda-Chevy Chase High School         | Educational           |
| Bethesda-Chevy Chase Fire Dept./Rescue 1 | Emergency Services    |
| Bethesda Fire/Rescue 20                  | Emergency Services    |
| Bethesda Fire Co. #6                     | Emergency Services    |
| Bethesda Library                         | Library               |
| Bethesda Police Annex                    | Emergency Services    |
| Bethesda Post Office                     | Post Office           |
| Bethesda Presbyterian Church             | Religious             |
| Christ Lutheran Church of Bethesda       | Religious             |
| Church in Bethesda                       | Religious             |
| Elm St. Park                             | Recreational          |
| Interim Georgetown Branch Trail          | Recreational          |
| National Institutes of Health            | Hospital              |
| National Library of Medicine             | Library               |
| National Naval Medical Center            | Hospital              |
| National Cardiology School               | Educational           |
| Our Lady of Lourdes Church and School    | Religious/Educational |

Source: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Montgomery County Department of Technology Services Geographic Information Systems, 2007

#### ***A.1.4. Access and Mobility***

The Bethesda neighborhood is served by Metrorail and numerous bus lines provided by WMATA Metrobus and Montgomery County Ride On. The Metrorail stations in the neighborhood are the Red Line's Bethesda and Medical Center stations. The Red Line provides service between Shady Grove in Rockville, travels south into Washington, and then north to Glenmont in Silver Spring. A free trolley, the Bethesda Circulator, serves portions of the CBD. The major bus lines in the neighborhood operate along Wisconsin Avenue, Jones Bridge Road, and East West Highway.

Major roadways in the neighborhood include Wisconsin Avenue and Woodmont Avenue, which run north and south, and Bradley Lane, Leland Street, East West Highway, Old Georgetown Road, and Jones Bridge Road, which run east and west.

A segment of the Capital Crescent Trail, the Interim Georgetown Branch Trail, is located in the southern portion of the neighborhood. The trail is heavily used by walkers and bikers.

Due to the urban character and transit accessibility of the area, the percentage of the neighborhood's population, 24 percent, that uses some type of public transportation to commute to work is greater than that of the entire study area, 21 percent, and Montgomery County, 13 percent. Eighteen percent of the neighborhood's households have no vehicle available.

### A.1.5. Population and Employment Projections

Bethesda is projected to experience tremendous population growth, as well as substantial job growth between 2000 and 2030.

| Population |        |                                      | Employment |        |                                      |
|------------|--------|--------------------------------------|------------|--------|--------------------------------------|
| 2000       | 2030   | Projected Total Change<br>(% Change) | 2000       | 2030   | Projected Total Change<br>(% Change) |
| 18,083     | 34,675 | +16,592 (+92%)                       | 58,976     | 71,762 | +12,786 (+22%)                       |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

Office and other employment will continue to be the largest sectors.

| Employment Sector |        |                   |       |                       |      |                  |        |
|-------------------|--------|-------------------|-------|-----------------------|------|------------------|--------|
| Office Employment |        | Retail Employment |       | Industrial Employment |      | Other Employment |        |
| 2000              | 2030   | 2000              | 2030  | 2000                  | 2030 | 2000             | 2030   |
| 26,688            | 33,895 | 4,956             | 5,775 | 41                    | 40   | 27,291           | 32,052 |

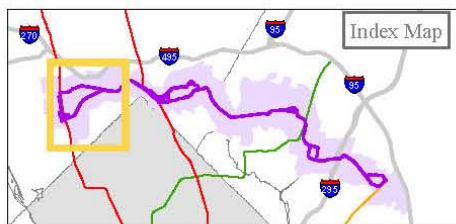
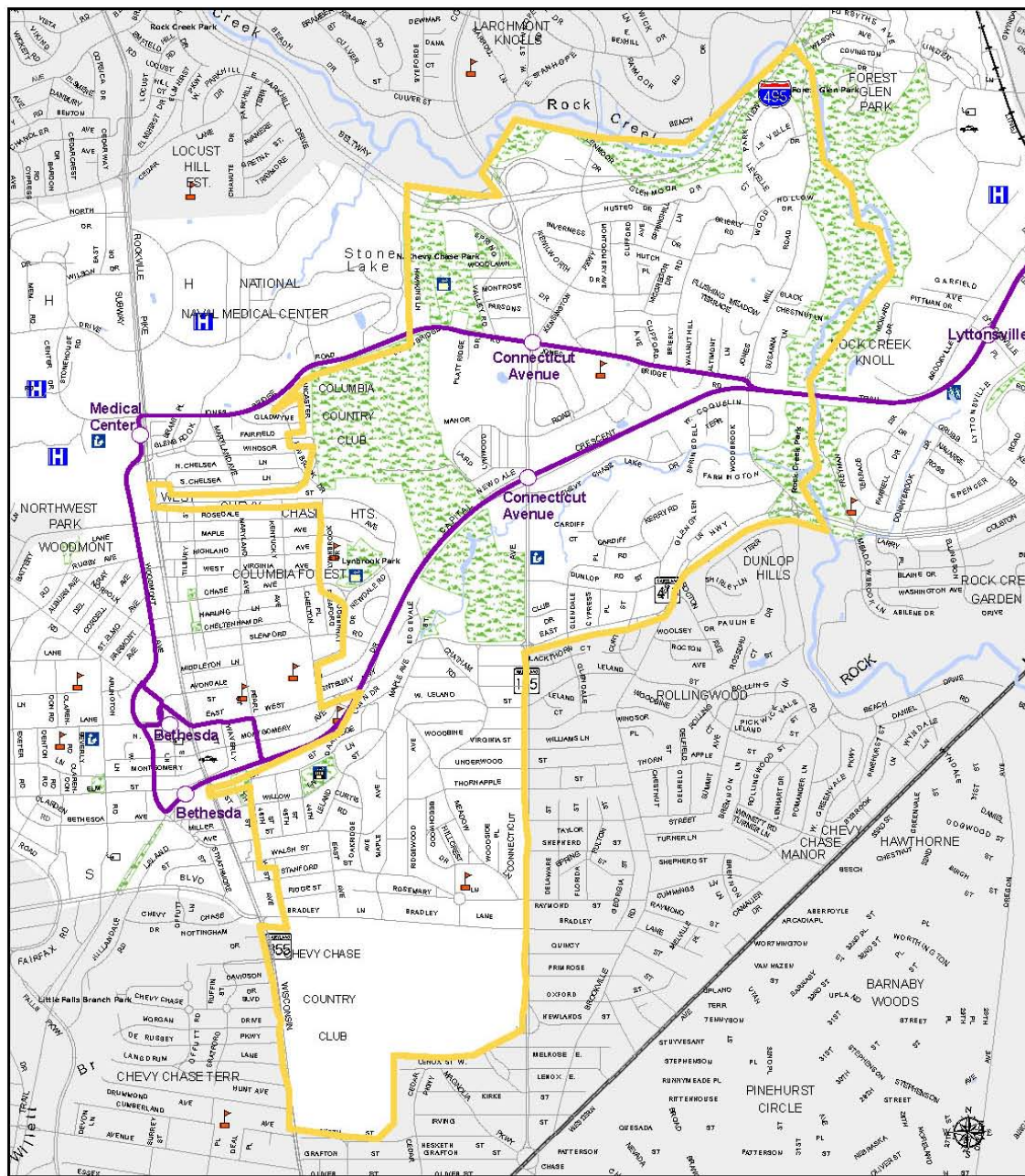
Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

## A.2. Chevy Chase Characteristics

The Chevy Chase neighborhood is in Montgomery County, northwest of Washington, D.C. and west of Rock Creek Stream Valley Park. It is bisected by Connecticut Avenue and is generally located north of Bradley Boulevard and south of the Capital Beltway (see Figure A-2). The neighborhood consists of the Chevy Chase and North Chevy Chase incorporated areas, and the primarily residential unincorporated areas in between these municipalities. The neighborhood also includes portions of the Chevy Chase CDP (US Census designated places). The neighborhood is primarily residential. Housing in Chevy Chase consists of large, single-family detached houses in established subdivisions, as well as townhouses and condominiums.



# **Chevy Chase Neighborhood Map**



| Purple Line                                                                         |                    | Community Profiles                                                                    |                  |
|-------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------|------------------|
| Figure A-2 Chevy Chase                                                              |                    |                                                                                       |                  |
| Legend                                                                              |                    |                                                                                       |                  |
|  | Proposed Stations  |    | Civic            |
|  | Proposed Alignment |  | Library          |
|  | Proposed Tunnel    |  | Post Office      |
|  | WMATA Metrorail    |  | Recreation       |
|  | MARC Commuter Rail |  | Worship          |
|                                                                                     |                    |    | Fire Station     |
|                                                                                     |                    |    | Community Center |
|                                                                                     |                    |    | Historic         |
|                                                                                     |                    |    | Hospital         |
|                                                                                     |                    |  | Schools          |
|                                                                                     |                    |  | Parks            |

Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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### A.2.1. Population

The Chevy Chase neighborhood is the least racially diverse neighborhood in the study area. The neighborhood has a predominantly White population (92 percent) that is greater than the study area (46 percent) and Montgomery County (65 percent).

Additionally, the median annual household income of \$130,400 makes the Chevy Chase neighborhood the most affluent neighborhood in the study area, which has a median income of \$48,812. Approximately two percent of the population lives below federal poverty levels.

#### Chevy Chase Demographics

| Category                                              | Neighborhood | Montgomery County<br>Portion of the<br>Study Area | Study Area | Montgomery<br>County |
|-------------------------------------------------------|--------------|---------------------------------------------------|------------|----------------------|
| Population                                            | 8,194        | 71,762                                            | 140,981    | 873,341              |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                                   |            |                      |
| White only                                            | 92%          | 51%                                               | 46%        | 65%                  |
| African-American or Black only                        | 3%           | 26%                                               | 31%        | 15%                  |
| American Indian/Native Alaskan only                   | <1%          | <1%                                               | 1%         | <1%                  |
| Asian                                                 | 3%           | 7%                                                | 6%         | 11%                  |
| Native Hawaiian/Pacific Islander only                 | <1%          | <1%                                               | <1%        | <1%                  |
| Other Race                                            | 1%           | 10%                                               | 11%        | 5%                   |
| Two or More Races                                     | 1%           | 5%                                                | 5%         | 4%                   |
| Hispanic Population                                   | 4%           | 20%                                               | 24%        | 12%                  |
| Median Household Income                               | \$131,149    | \$51,208                                          | \$48,812   | \$71,551             |
| People Living Below Poverty                           | 2%           | 9%                                                | 12%        | 5%                   |
| Linguistically Isolated Households                    | 2%           | 10%                                               | 13%        | 6%                   |
| Using Public Transportation to Work                   | 14%          | 26%                                               | 21%        | 13%                  |
| Households with No Vehicle Available                  | 11%          | 8%                                                | 17%        | 8%                   |
| Housing Units                                         | 3,421        | 31,596                                            | 52,328     | 334,632              |
| Owner-Occupied Households                             | 77%          | 37%                                               | 40%        | 69%                  |
| Renter-Occupied Households                            | 23%          | 63%                                               | 60%        | 31%                  |
| Vacant Residences                                     | 4%           | 3%                                                | 4%         | 3%                   |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The federal government defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

### A.2.2. Housing

The Chevy Chase neighborhood is suburban. Most housing consists of large houses on tree-lined streets, with a few areas of townhouses, condominiums, and apartments. Seventy-seven



percent of the households in the neighborhood were owner-occupied compared to 40 percent for the study area and 69 percent for Montgomery County.

#### **A.2.3. Community Facilities and Services**

Several community facilities and services were identified within the Chevy Chase neighborhood. These are listed in Table A-4 and can be found on Figure A-2.

**Chevy Chase Community Facilities**

| <b>Facility Name</b>                    | <b>Type of Facility</b> |
|-----------------------------------------|-------------------------|
| Chevy Chase Elementary School           | Educational             |
| Chevy Chase Fire Co. #7                 | Emergency Services      |
| Chevy Chase Library                     | Library                 |
| Chevy Chase-Leland Community Center     | Recreational            |
| Christian Science Church of Chevy Chase | Religious               |
| Interim Georgetown Branch Trail         | Recreational            |
| Leland Park                             | Recreational            |
| Lynbrook Park                           | Recreational            |
| Lynbrook Recreation Building            | Recreational            |
| North Chevy Chase Church                | Religious               |
| North Chevy Chase Elementary School     | Educational             |
| North Chevy Chase Park                  | Recreational            |
| Rock Creek Park                         | Recreational            |
| Rock Creek Park Hiker/Biker Trail       | Recreational            |
| St. John's Episcopal Church             | Religious               |
| Chevy Chase Town Hall                   | Civic                   |

Source: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Montgomery County Department of Technology Services Geographic Information Systems, 2007

#### **A.2.4. Access and Mobility**

The Chevy Chase neighborhood is served by Metrobus and Ride On. Major bus lines in the neighborhood operate along Connecticut Avenue, Jones Bridge Road, and East West Highway.

Major roadways through the neighborhood include Connecticut Avenue and Jones Mill Road, which run north and south, and Bradley Lane, East West Highway, and Jones Bridge Road, which run east and west.

The Interim Georgetown Branch Trail runs east to west and bisects the neighborhood. The trail is heavily used by walkers and bikers.

The percentage of the neighborhood's population (almost 14 percent) that uses some type of public transportation to commute to work is less than the entire study area (21 percent), but similar to Montgomery County (13 percent). The percentage of the neighborhood's households with no vehicle available (just over 11 percent) is less than that of the study area (17 percent), but more than Montgomery County (around 8 percent).

### A.2.5. *Population and Employment Projections*

Chevy Chase is projected to experience substantial population and employment growth rates between 2000 and 2030, but the number of jobs reflects the residential character of this area.

| Population |        |                                      | Employment |       |                                      |
|------------|--------|--------------------------------------|------------|-------|--------------------------------------|
| 2000       | 2030   | Projected Total Change<br>(% Change) | 2000       | 2030  | Projected Total Change<br>(% Change) |
| 9,687      | 12,779 | +3,092 (+32%)                        | 3,818      | 4,702 | +884 (+23%)                          |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

Office and other employment will continue to be the largest sectors.

| Employment Sector |       |                   |      |                       |      |                  |       |
|-------------------|-------|-------------------|------|-----------------------|------|------------------|-------|
| Office Employment |       | Retail Employment |      | Industrial Employment |      | Other Employment |       |
| 2000              | 2030  | 2000              | 2030 | 2000                  | 2030 | 2000             | 2030  |
| 1,563             | 1,952 | 292               | 750  | 0                     | 0    | 1,963            | 2,000 |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

## A.3. *Rock Creek Forest/Lyttonsville/Rosemary Hills Characteristics*

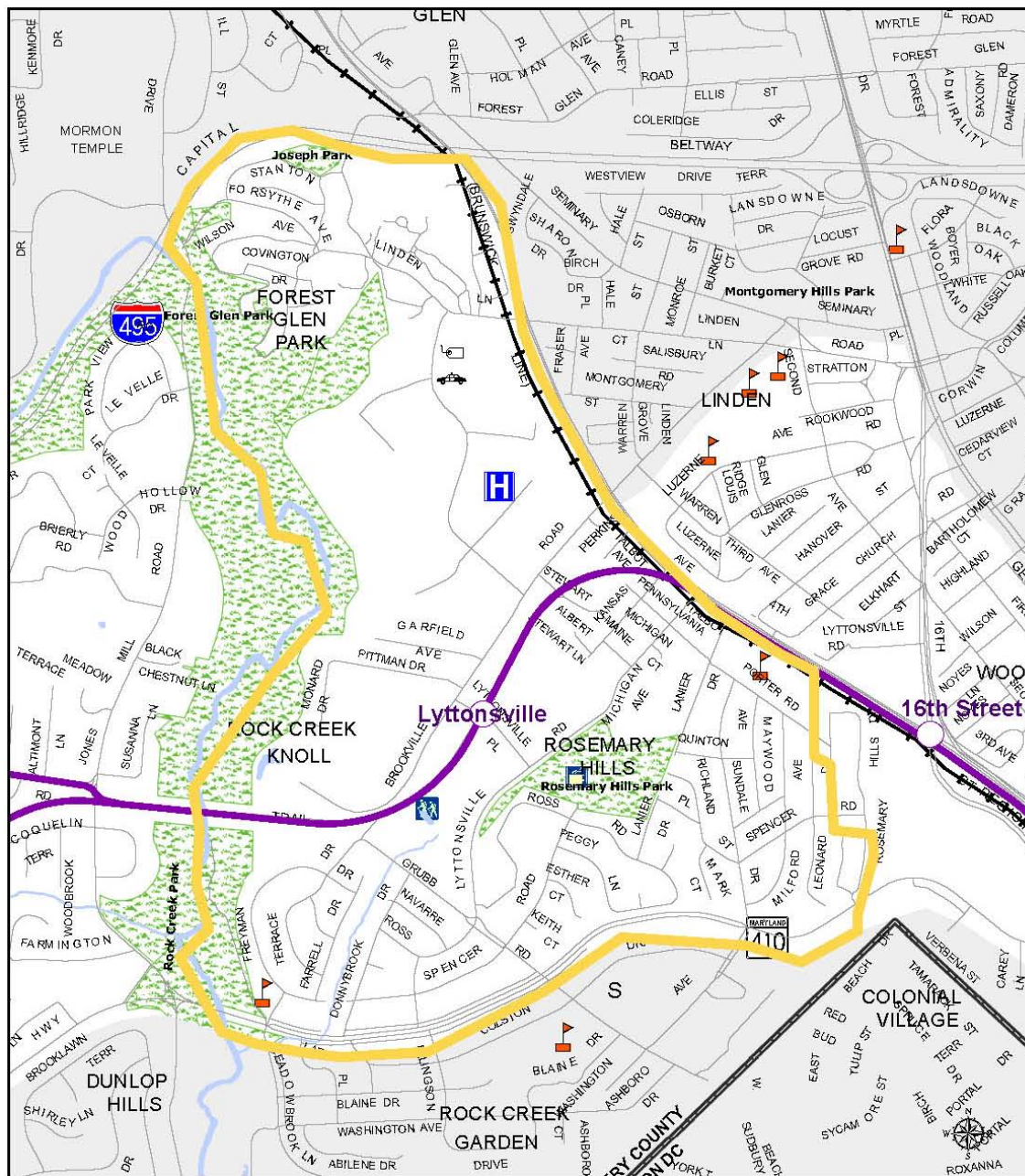
The Rock Creek Forest/Lyttonsville/Rosemary Hills neighborhood is in Montgomery County east of Rock Creek Park, north of East West Highway, south of the Capital Beltway, and west of the CSX Railroad tracks (see Figure A-3). The neighborhood is unincorporated, but is entirely within the Silver Spring CDP.

The neighborhood is mostly residential. Light industrial uses are located along Brookville Road. The neighborhood is bordered on the west by Rock Creek Park.

### A.3.1. *Population*

The neighborhood is racially diverse; its racial distribution closely resembles that of the study area. The neighborhood is 43 percent White, 31 percent Black, seven percent Asian, 12 percent other races, and 6 percent of two or more races. Twenty-seven percent of the population is Hispanic. People living in linguistically-isolated households comprise almost 16 percent of the population, which is greater than the study area (nearly 13 percent), Montgomery County (just over 6 percent) and Prince George's County (almost 4 percent). The median annual household income in the neighborhood is \$48,711 compared to \$51,028 for the Montgomery County portion of the study area.

## Rock Creek Forest/Lyttonsville/Rosemary Hills Neighborhood Map



Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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### Rock Creek Forest/Lyttonsville/Rosemary Hills Demographics

| Category                                              | Neighborhood | Montgomery County Portion of the Study Area | Study Area | Montgomery County |
|-------------------------------------------------------|--------------|---------------------------------------------|------------|-------------------|
| Population                                            | 5,611        | 71,762                                      | 140,981    | 873,341           |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                             |            |                   |
| White only                                            | 43%          | 51%                                         | 46%        | 65%               |
| African-American or Black only                        | 31%          | 27%                                         | 31%        | 15%               |
| American Indian/Native Alaskan only                   | 1%           | <1%                                         | 1%         | <1%               |
| Asian                                                 | 7%           | 7%                                          | 6%         | 11%               |
| Native Hawaiian/Pacific Islander only                 | <1%          | <1%                                         | <1%        | <1%               |
| Other Race                                            | 12%          | 10%                                         | 11%        | 5%                |
| Two or More Races                                     | 6%           | 5%                                          | 5%         | 4%                |
| Hispanic Population                                   | 27%          | 20%                                         | 24%        | 12%               |
| Median Household Income                               | \$48,711     | \$51,208                                    | \$48,812   | \$71,551          |
| People Living Below Poverty                           | 9%           | 9%                                          | 11.7%      | 5.4%              |
| Linguistically Isolated Households                    | 16%          | 10%                                         | 12.5%      | 6.2%              |
| Using Public Transportation to Work                   | 23%          | 26%                                         | 21%        | 13%               |
| Households with No Vehicle Available                  | 13%          | 7.5%                                        | 17%        | 7.5%              |
| Housing Units                                         | 2,026        | 31,596                                      | 52,328     | 334,632           |
| Owner-Occupied Households                             | 40%          | 37%                                         | 40%        | 69%               |
| Renter-Occupied Households                            | 60%          | 63%                                         | 60%        | 31%               |
| Vacant Residences                                     | 2.6%         | 3%                                          | 3.8%       | 3.0%              |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The federal government defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

#### A.3.2. ***Housing***

Most residential areas are south of Brookville Road. Forty percent of the housing units in the neighborhood are owner-occupied compared with 40 percent for the study area, and 69 percent for Montgomery County. The percentage of renter-occupied households is 60 percent compared to the study area (60 percent), Montgomery County (31 percent), and Prince George's County (38 percent). Apartment complexes are located to the north and west of Rosemary Hills-Lyttonsville Park and in the southeast portion of the neighborhood along East West Highway. The remaining residential areas contain single-family houses of diverse sizes and ages. The northern portion of the neighborhood contains the National Park Seminary and an older, secluded area with single-family houses adjacent to the hills of Rock Creek Park. Portions of the National Park Seminary are being converted into single-family and multi-family housing.



### **A.3.3. Community Facilities and Services**

Several community facilities and services were identified within the Rock Creek Forest/Lyttonsville/Rosemary Hills neighborhood. These facilities are listed in Table A-6 and are shown in Figure A-3.

**Rock Creek Forest/Lyttonsville/Rosemary Hills  
Community Facilities**

| <b>Facility Name</b>                                | <b>Type of Facility</b> |
|-----------------------------------------------------|-------------------------|
| Christ the King Catholic Church                     | Religious               |
| Coffield Community Center                           | Recreational            |
| Federal Fire Station 54                             | Emergency Services      |
| Interim Georgetown Branch Trail                     | Recreational            |
| Military Police                                     | Emergency Services      |
| Military Post Office                                | Post Office             |
| Ohr Kodesh Congregation                             | Religious               |
| Ohr Kodesh School                                   | Educational             |
| Pilgrim Baptist Church                              | Religious               |
| Rosemary Hills Elementary School                    | Educational             |
| Rock Creek Forest Elementary School                 | Educational             |
| Rosemary Hills – Lyttonsville Local Park            | Recreational            |
| Rosemary Hills Primary School                       | Educational             |
| Temple Shalom                                       | Religious               |
| Walter Reed Army Medical Center – Forest Glen Annex | Hospital                |

Source: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Montgomery County Department of Technology Services Geographic Information Systems, 2007

### **A.3.4. Access and Mobility**

The Rock Creek Forest/Lyttonsville/Rosemary Hills neighborhood is served by Metrobus and Ride On. Major bus lines in the neighborhood operate along East West Highway, Grubb Road, and Brookville Road.

Major roadways through the neighborhood include Grubb Road, which run northwest and southeast, Brookville Road which runs southwest to northeast, and East West Highway, which runs east and west.

A section of the Interim Georgetown Branch Trail runs east to west through the neighborhood. The trail is used by walkers and bikers. Parts of the trails are located on neighborhood streets

Twenty-three percent of the neighborhood's population uses some type of public transportation to commute to work. The percentage of the neighborhood's households with no vehicle available (13 percent) is less than that of the study area (17 percent), but more than Montgomery County (less than 8 percent).

### A.3.5. *Population and Employment Projections*

The Rock Creek Forest/Lyttonsville/Rosemary Hills neighborhood is projected to experience population and employment loss between 2000 and 2030.

| Population |       |                                      | Employment |       |                                      |
|------------|-------|--------------------------------------|------------|-------|--------------------------------------|
| 2000       | 2030  | Projected Total Change<br>(% Change) | 2000       | 2030  | Projected Total Change<br>(% Change) |
| 11,277     | 9,013 | -2,264 (-20%)                        | 4,380      | 3,845 | -535 (-12%)                          |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

The Rock Creek Forest/Lyttonsville/Rosemary Hills neighborhood has a high proportion of industrial jobs and other employment. This is not expected to change in 2030.

| Employment Sector |      |                   |      |                       |       |                  |       |
|-------------------|------|-------------------|------|-----------------------|-------|------------------|-------|
| Office Employment |      | Retail Employment |      | Industrial Employment |       | Other Employment |       |
| 2000              | 2030 | 2000              | 2030 | 2000                  | 2030  | 2000             | 2030  |
| 216               | 186  | 217               | 208  | 1,144                 | 1,090 | 2,803            | 2,361 |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

## A.4. *Woodside Characteristics*

The Woodside neighborhood is in Montgomery County, north of Washington, D.C. It is bisected by Second Avenue, situated west of Georgia Avenue, east of Talbot Avenue, and south of Brookville Road (see Figure A-4). Woodside is unincorporated and is partially within the Silver Spring CDP.

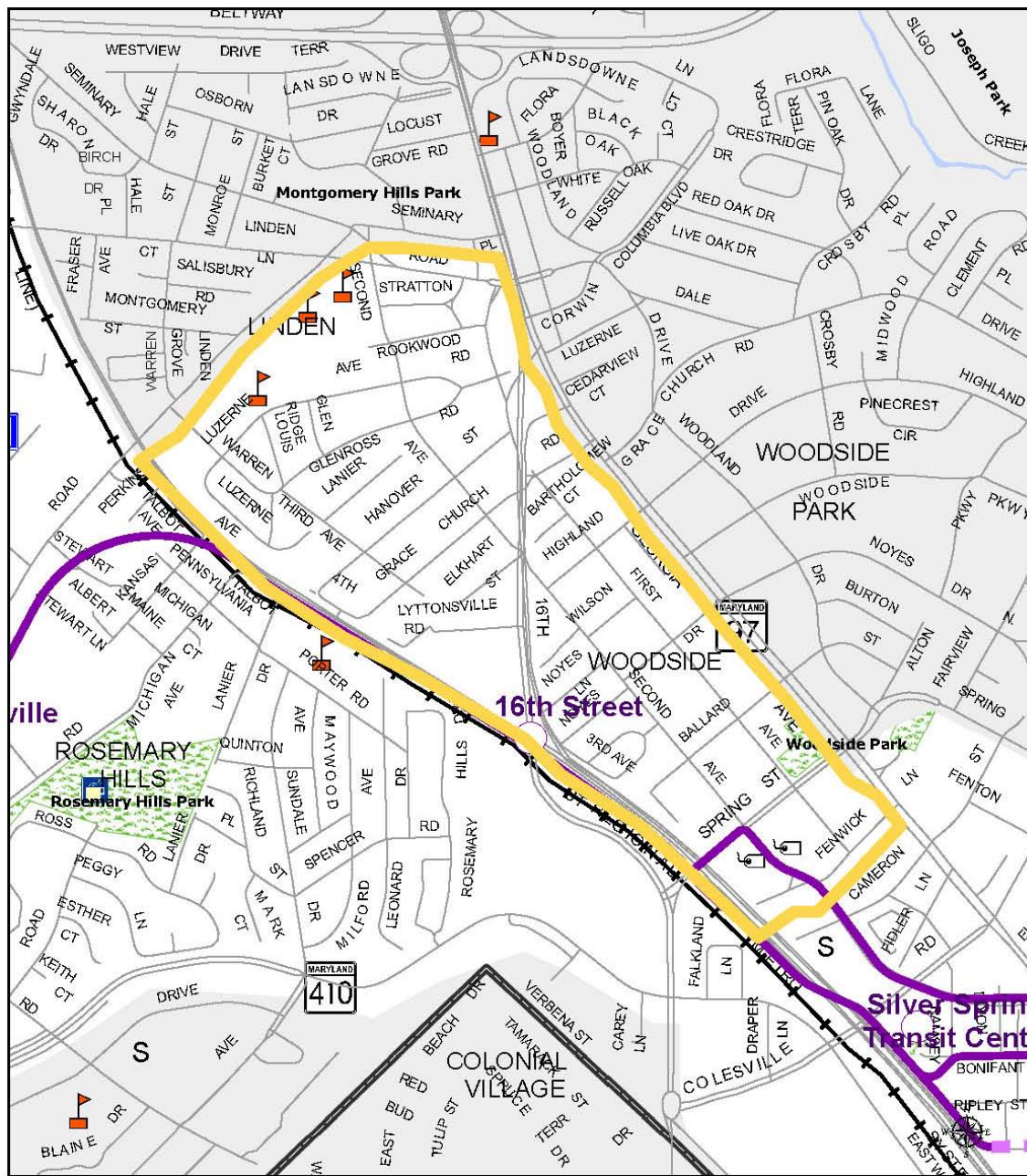
Woodside is a predominantly residential area. A commercial area is located along Georgia Avenue at the intersection of Dale Drive and Seminary Road.

### A.4.1. *Population*

The Woodside neighborhood has approximately 3,600 people (Table A-7). The neighborhood has a white population (55 percent) that is greater than the study area (46 percent), but less than Montgomery County (65 percent), and a lower percentage of Hispanic people (9 percent) than the study area (24 percent) and Montgomery County (12 percent). The median annual household income is \$72,414, which is similar to the Montgomery County median income of \$71,551, but exceeds the median income of \$51,028 for the Montgomery County portion of the study area and \$48,812 for the overall study area.



## Woodside Neighborhood Map



| Purple Line                                                                         |                    | Community Profiles                                                                    |                  |
|-------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------|------------------|
| Figure A-4 Woodside                                                                 |                    |                                                                                       |                  |
| Legend                                                                              |                    |                                                                                       |                  |
|  | Proposed Stations  |    | Civic            |
|  | Proposed Alignment |    | Community Center |
|  | Proposed Tunnel    |    | Fire Station     |
|  | WMATA Metrorail    |    | Historic         |
|  | MARC Commuter Rail |    | Hospital         |
|                                                                                     |                    |  | Library          |
|                                                                                     |                    |  | Police           |
|                                                                                     |                    |  | Post Office      |
|                                                                                     |                    |  | Recreation       |
|                                                                                     |                    |  | Worship          |
|                                                                                     |                    |  | Schools          |
|                                                                                     |                    |  | Parks            |

Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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### Woodside Demographics

| Category                                              | Neighborhood | Montgomery County Portion of the Study Area | Study Area | Montgomery County |
|-------------------------------------------------------|--------------|---------------------------------------------|------------|-------------------|
| Population                                            | 3,601        | 71,762                                      | 140,981    | 873,341           |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                             |            |                   |
| White only                                            | 55%          | 51%                                         | 46%        | 65%               |
| African-American or Black only                        | 33%          | 27%                                         | 31%        | 15%               |
| American Indian/Native Alaskan only                   | <1%          | <1%                                         | 1%         | <1%               |
| Asian                                                 | 5%           | 7%                                          | 6%         | 11%               |
| Native Hawaiian/Pacific Islander only                 | 0%           | <1%                                         | <1%        | <1%               |
| Other Race                                            | 3%           | 10%                                         | 11%        | 5%                |
| Two or More Races                                     | 3%           | 5%                                          | 5%         | 4%                |
| Hispanic Population                                   | 9%           | 20%                                         | 24%        | 12%               |
| Median Household Income                               | \$72,414     | \$51,208                                    | \$48,812   | \$71,551          |
| People Living Below Poverty                           | 8%           | 9%                                          | 11.7%      | 5.4%              |
| Linguistically Isolated Households                    | 5%           | 10%                                         | 12.5%      | 6.2%              |
| Using Public Transportation to Work                   | 33%          | 26%                                         | 21%        | 13%               |
| Households with No Vehicle Available                  | 15.5%        | 7.5%                                        | 17%        | 7.5%              |
| Housing Units                                         | 1,910        | 31,596                                      | 52,328     | 334,632           |
| Owner-Occupied Households                             | 41%          | 37%                                         | 40%        | 69%               |
| Renter-Occupied Households                            | 58%          | 63%                                         | 60%        | 31%               |
| Vacant Residences                                     | 3%           | 3%                                          | 4%         | 3%                |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The U.S. Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

#### ***A.4.2. Housing***

The Woodside neighborhood is predominantly residential with about 1,900 housing units. Housing is mostly single-family houses built in the early 1900s along with more recent townhouse subdivisions with newly constructed single-family houses mixed in. Similar to the Purple Line study area, 41 percent of households in the neighborhood are owner-occupied.

#### ***A.4.3. Community Facilities and Services***

Several community facilities and services were identified within the Woodside neighborhood. These facilities are listed in Table A-8 and can be found on Figure A-4.



### Woodside Community Facilities

| Facility Name                                | Type of Facility   |
|----------------------------------------------|--------------------|
| First Church of Christ Scientist             | Religious          |
| Silver Spring Fire Co. #19                   | Emergency Services |
| Silver Spring Finance Post Office            | Post Office        |
| Silver Spring Post Office                    | Post Office        |
| Torah School of Greater Washington (boys)    | Educational        |
| Woodlin Elementary School                    | Educational        |
| Woodside United Methodist Church             | Religious          |
| Woodside Park                                | Recreational       |
| Yeshiva School of Greater Washington (girls) | Educational        |

Source: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Montgomery County Department of Technology Services Geographic Information Systems, 2007

#### A.4.4. Access and Mobility

The Woodside neighborhood is served by Metrobus and Ride On. Major bus lines in the neighborhood operate along 16<sup>th</sup> Street and Second Avenue.

Major arterials include 16<sup>th</sup> Street, which runs north and south, and Georgia Avenue and Second Avenue, which run northwest to southeast.

The percentage of the neighborhood's population (33 percent) that uses some type of public transportation to commute to work is greater than the entire study area (21 percent), Montgomery County (13 percent) and the Montgomery County portion of the study area (26 percent). The percentage of neighborhood households with no vehicle available (over 15 percent) is less than that of the study area (17 percent), but more than Montgomery County and the Montgomery County portion of the study area (both nearly 8 percent).

#### A.4.5. Population and Employment Projections

Woodside is expected to increase in population by 50% and to experience an 11 percent increase in employment.

| Population |       |                                      | Employment |       |                                      |
|------------|-------|--------------------------------------|------------|-------|--------------------------------------|
| 2000       | 2030  | Projected Total Change<br>(% Change) | 2000       | 2030  | Projected Total Change<br>(% Change) |
| 3,493      | 5,234 | +1,741 (+50%)                        | 1,530      | 1,700 | +170 (+11%)                          |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

Industrial employment is the largest employment sector in Woodside and is expected to continue to be so in 2030.

| Employment Sector |      |                   |      |                       |      |                  |      |
|-------------------|------|-------------------|------|-----------------------|------|------------------|------|
| Office Employment |      | Retail Employment |      | Industrial Employment |      | Other Employment |      |
| 2000              | 2030 | 2000              | 2030 | 2000                  | 2030 | 2000             | 2030 |
| 293               | 314  | 264               | 296  | 786                   | 884  | 187              | 206  |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

## A.5. Silver Spring Characteristics

The Silver Spring neighborhood is in Montgomery County. It is bounded by Washington, D.C. to the south, Chicago and Sligo Avenues to the east, Sligo Creek to the north, and Colesville Road and Spring Street to the west. The neighborhood contains a portion of the larger unincorporated area commonly known as Silver Spring, and includes the Silver Spring CBD and adjacent residential areas (see Figure A-5).

The Silver Spring CBD has benefited from recent revitalization initiatives that resulted in an on-going downtown rebirth in the late 1990s and 2000s. The neighborhood consists of a mix of high-rise office and apartment buildings, assorted commercial and retail sites, apartments, and single-family house subdivisions. Construction of the new Silver Spring Transit Center is underway, which will expand the current Metro Station to accommodate growing demand for public transportation. The new multi-level facility will be used by Metrobus, Ride On, Metrorail, MARC train, intercity Greyhound bus, and local taxi service. It has been designed to accommodate the Purple Line. The transit center should be completed by 2010.

### A.5.1. Population

The demographic composition of the Silver Spring neighborhood largely mirrors that of the study area (Table A-9). The Black population in Silver Spring (40 percent) is higher than the study area (31 percent) and Montgomery County (15 percent). The White population is 43 percent and the remaining population (17 percent) includes Asians, people of two or more races, or people of other races. The Hispanic population (13 percent) is less than that of the study area (24 percent). Approximately seven percent of the households are linguistically isolated. The median annual household income is \$46,002 slightly less than the study area and the Montgomery County portion of the study area (\$51,028).

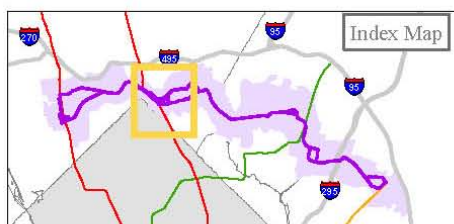
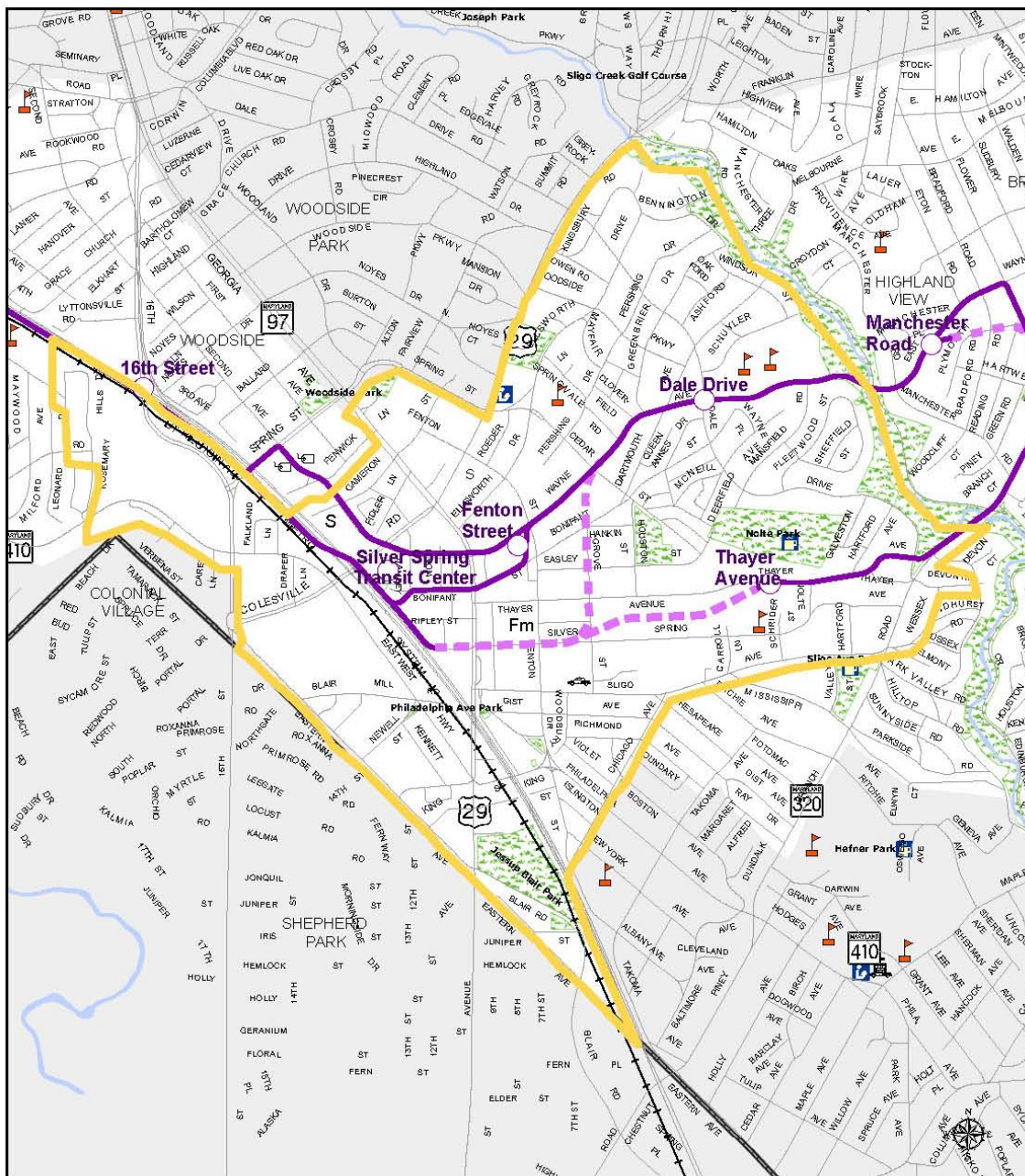
### A.5.2. Housing

The neighborhood consists of a mix of high-rise apartment buildings and condominiums in the CBD, and single-family residential houses outside of the CBD. The housing units in the neighborhoods are predominately renter-occupied (82 percent), which exceeds the study area 6 percent), Montgomery County (31 percent), and the Montgomery County portion of the study area (63 percent).





## Silver Spring Neighborhood Map



| Purple Line                                                                         |                    | Community Profiles                                                                  |                  |                                                                                       |             |                                                                                       |         |
|-------------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------|---------|
| Figure A-5 Silver Spring                                                            |                    |                                                                                     |                  |                                                                                       |             |                                                                                       |         |
| Legend                                                                              |                    |                                                                                     |                  |                                                                                       |             |                                                                                       |         |
|  | Proposed Stations  |  | Civic            |  | Library     |  | Schools |
|  | Proposed Alignment |  | Community Center |  | Police      |  | Parks   |
|  | Proposed Tunnel    |  | Fire Station     |  | Post Office |                                                                                       |         |
|  | WMATA Metrorail    |  | Historic         |  | Recreation  |                                                                                       |         |
|  | MARC Commuter Rail |  | Hospital         |  | Worship     |                                                                                       |         |

Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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### A.5.3. Community Facilities and Services

Several community facilities and services were identified within the Silver Spring neighborhood. These facilities are listed in Table A-10 and can be found on Figure A-5.

**Silver Spring Demographics**

| Category                                              | Neighborhood | Montgomery County Portion of the Study Area | Study Area | Montgomery County |
|-------------------------------------------------------|--------------|---------------------------------------------|------------|-------------------|
| Population                                            | 17,222       | 71,762                                      | 140,981    | 873,341           |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                             |            |                   |
| White only                                            | 43%          | 51%                                         | 46%        | 65%               |
| African-American or Black only                        | 40%          | 27%                                         | 31%        | 15%               |
| American Indian/Native Alaskan only                   | <1%          | <1%                                         | 1%         | <1%               |
| Asian                                                 | 7%           | 7%                                          | 6%         | 11%               |
| Native Hawaiian/Pacific Islander only                 | <1%          | <1%                                         | <1%        | <1%               |
| Other Race                                            | 5%           | 10%                                         | 11%        | 5%                |
| Two or More Races                                     | 5%           | 5%                                          | 5%         | 4%                |
| Hispanic Population                                   | 13%          | 20%                                         | 24%        | 12%               |
| Median Household Income                               | \$46,002     | \$51,208                                    | \$48,812   | \$71,551          |
| People Living Below Poverty                           | 9%           | 9%                                          | 11.7%      | 5.4%              |
| Linguistically Isolated Households                    | 7%           | 10%                                         | 12.5%      | 6.2%              |
| Using Public Transportation to Work                   | 33%          | 26%                                         | 21%        | 13%               |
| Households with No Vehicle Available                  | 24.1%        | 7.5%                                        | 17%        | 7.5%              |
| Housing Units                                         | 8,874        | 31,596                                      | 52,328     | 334,632           |
| Owner-Occupied Households                             | 18%          | 37%                                         | 40%        | 69%               |
| Renter-Occupied Households                            | 82%          | 63%                                         | 60%        | 31%               |
| Vacant Residences                                     | 3.0%         | 3%                                          | 3.8%       | 3.0%              |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The U.S. Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.



### Silver Spring Community Facilities

| Facility Name                                                                                                                                            | Type of Facility   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Chelsea School                                                                                                                                           | Educational        |
| Church of the Ascension                                                                                                                                  | Religious          |
| East Silver Spring Elementary School                                                                                                                     | Educational        |
| East Silver Spring Neighborhood Park                                                                                                                     | Recreational       |
| Sligo Creek Park                                                                                                                                         | Recreational       |
| Ellsworth Park                                                                                                                                           | Recreational       |
| First Baptist Church of Silver Spring                                                                                                                    | Religious          |
| Jessup Blair Park                                                                                                                                        | Recreational       |
| Montgomery Knolls Elementary School                                                                                                                      | Educational        |
| Nolte Community Center                                                                                                                                   | Recreational       |
| Nolte Park                                                                                                                                               | Recreational       |
| Redeemed Christian Church of God                                                                                                                         | Religious          |
| St. Mary's Baptist Church                                                                                                                                | Religious          |
| St. Michael's Church                                                                                                                                     | Religious          |
| Silver Spring Baptist Church                                                                                                                             | Religious          |
| Silver Spring Police                                                                                                                                     | Emergency Services |
| Silver Spring Regional Services Center                                                                                                                   | Point of Interest  |
| Silver Spring International Middle School                                                                                                                | Educational        |
| Silver Spring Library                                                                                                                                    | Library            |
| Sligo Creek Elementary School                                                                                                                            | Educational        |
| Sources: ADC Greater Washington, D.C., 8 <sup>th</sup> Edition, Montgomery County Department of Technology Services Geographic Information Systems, 2007 |                    |

#### ***A.5.4. Access and Mobility***

The neighborhood is served by Metrorail, MARC trains and numerous bus lines provided by Metrobus, Ride On, and the free VanGo. A bus transfer station is located at the Silver Spring Metro Station. Major bus lines in the neighborhood operate along Georgia Avenue, Colesville Road, and East West Highway. The Silver Spring Metro Station provides access to the Red Line, which extends north to the Glenmont Station and south to downtown Washington, D.C. before traveling north to the Shady Grove Station in Rockville. Access to the MARC train's Brunswick line is also available at the Silver Spring Metro Station. The Brunswick line offers morning service from Martinsburg, West Virginia, and Frederick, Maryland, through Silver Spring into downtown Washington, D.C. Afternoon and evening trains provide return service.

Major roadways through the neighborhood include Georgia Avenue, Colesville Road, Piney Branch Road, and 16<sup>th</sup> Street, which generally run north and south, and Spring Street, Dale Drive, Wayne Avenue, and East West Highway, which generally run east and west.

Pedestrian traffic is high in the CBD. The neighborhood also contains the Silver Spring Connector Route, which connects the Capital Crescent Trail to the Silver Spring CBD via streets and sidewalks. Paths that access the Sligo Creek Stream Valley Trail system are located in various areas along the northeast border of the neighborhood.



A higher percentage of the neighborhood's population (34 percent) uses some type of public transportation to commute to work compared to the entire study area (21 percent), Montgomery County (13 percent), and the Montgomery County portion of the study area (26 percent). This corresponds to findings indicating that the percentage of the neighborhood's households with no vehicle available (just over 24 percent) is higher than that of the study area (17 percent), Montgomery County, and the Montgomery County portion of the study area (both nearly 8 percent).

#### **A.5.5. Population and Employment Projections**

Silver Spring is expected to experience substantial population growth as well as high employment growth.

| Population |        |                                      | Employment |        |                                      |
|------------|--------|--------------------------------------|------------|--------|--------------------------------------|
| 2000       | 2030   | Projected Total Change<br>(% Change) | 2000       | 2030   | Projected Total Change<br>(% Change) |
| 14,293     | 35,667 | +21,374 (+150%)                      | 29,897     | 36,008 | +6,111 (+20%)                        |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

Office employment will continue to be the primary employment sector in Silver Spring, with retail as the next largest sector.

| Employment Sector |        |                   |       |                       |       |                  |       |
|-------------------|--------|-------------------|-------|-----------------------|-------|------------------|-------|
| Office Employment |        | Retail Employment |       | Industrial Employment |       | Other Employment |       |
| 2000              | 2030   | 2000              | 2030  | 2000                  | 2030  | 2000             | 2030  |
| 19,984            | 23,816 | 6,063             | 7,669 | 1,542                 | 1,640 | 2,308            | 2,883 |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

### **A.6. East Silver Spring Characteristics**

The East Silver Spring neighborhood is in Montgomery County. It is bounded by Sligo Creek to the west, Franklin Avenue to the north, Wayne Avenue and Piney Branch Road to the south, and Northwest Branch Stream Valley Park to the east (see Figure A-6). It is located entirely within the Silver Spring CDP.

The neighborhood consists of residential subdivisions, apartment buildings, and high rise and garden condominiums. The neighborhood has an abundance of trees and parks that intertwine and dot its subdivisions.

#### **A.6.1. Population**

Table A-11 indicates that the neighborhood is racially diverse and has a White population of 36 percent, a Black population of 30 percent, an Asian population of 9 percent, a population of two or more races of 8 percent, and populations consisting of some other race of 16 percent. The



percentage of Hispanics (25 percent) closely mirrors the study area's percentage and is higher than the Montgomery County portion of the study area (20 percent) and Montgomery County as a whole (12 percent). More than 16 percent of the households are linguistically isolated compared to the study area (nearly 13 percent), Montgomery County (just over 6 percent), and the Montgomery County portion of the study area (10 percent). The percentage of people living below the poverty line is about 13 percent for the neighborhood compared to the study area (approximately 12 percent), Montgomery County (just over 5 percent), and the Montgomery County portion of the study area (9 percent). The median annual household income is \$56,549

compared to a median of \$51,028 for the Montgomery County portion of the study area.

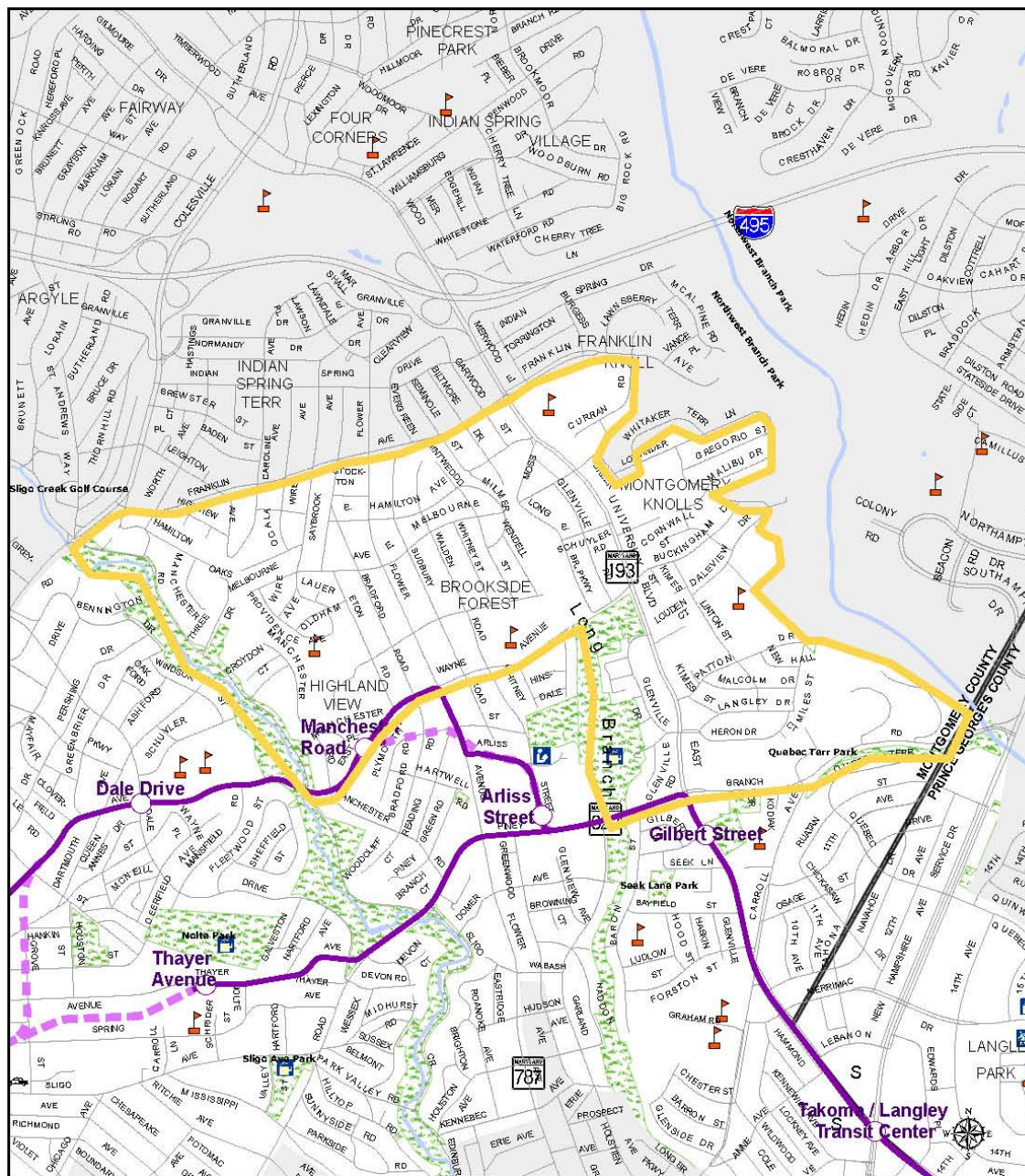
### East Silver Spring Demographics

| Category                                              | Neighborhood | Montgomery County Portion of the Study Area | Study Area | Montgomery County |
|-------------------------------------------------------|--------------|---------------------------------------------|------------|-------------------|
| Population                                            | 9,755        | 71,762                                      | 140,981    | 873,341           |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                             |            |                   |
| White only                                            | 36%          | 51%                                         | 46%        | 65%               |
| African-American or Black only                        | 30%          | 27%                                         | 31%        | 15%               |
| American Indian/Native Alaskan only                   | <1%          | <1%                                         | 1%         | <1%               |
| Asian                                                 | 9%           | 7%                                          | 6%         | 11%               |
| Native Hawaiian/Pacific Islander only                 | <1%          | <1%                                         | <1%        | <1%               |
| Other Race                                            | 16%          | 10%                                         | 11%        | 5%                |
| Two or More Races                                     | 8%           | 5%                                          | 5%         | 4%                |
| Hispanic Population                                   | 25%          | 20%                                         | 24%        | 12%               |
| Median Household Income                               | \$56,549     | \$51,208                                    | \$48,812   | \$71,551          |
| People Living Below Poverty                           | 13%          | 9%                                          | 11.7%      | 5.4%              |
| Linguistically Isolated Households                    | 16%          | 10%                                         | 12.5%      | 6.2%              |
| Using Public Transportation to Work                   | 19%          | 26%                                         | 21%        | 13%               |
| Households with No Vehicle Available                  | 12%          | 7.5%                                        | 17%        | 7.5%              |
| Housing Units                                         | 3,713        | 31,596                                      | 52,328     | 334,632           |
| Owner-Occupied Households                             | 54%          | 37%                                         | 40%        | 69%               |
| Renter-Occupied Households                            | 46%          | 63%                                         | 60%        | 31%               |
| Vacant Residences                                     | 3.2%         | 3%                                          | 3.8%       | 3.0%              |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The U.S. Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

## East Silver Spring Neighborhood Map



| Purple Line                                                                                            |                                                                                                      | Community Profiles                                                                                |                                                                                               |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Figure A-6 East Silver Spring                                                                          |                                                                                                      |                                                                                                   |                                                                                               |
| Legend                                                                                                 |                                                                                                      |                                                                                                   |                                                                                               |
|  Proposed Stations  |  Civic            |  Library     |  Schools |
|  Proposed Alignment |  Community Center |  Police      |  Parks   |
|  Proposed Tunnel    |  Fire Station     |  Post Office |                                                                                               |
|  WMATA Metrorail    |  Historic         |  Recreation  |                                                                                               |
|  MARC Commuter Rail |  Hospital         |  Worship     |                                                                                               |

Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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#### **A.6.2.      *Housing***

The neighborhood mainly consists of residential subdivisions. Apartment buildings and high rise and garden condominiums are dispersed through the neighborhood along Sligo Creek Parkway, University Boulevard, and Piney Branch Road. Fifty-four percent of the households in the neighborhood are owner-occupied, compared to 40 percent for the study area, and 37 percent for the Montgomery County portion of the study area.

#### **A.6.3.      *Community Facilities and Services***

Several community facilities and services were identified within East Silver Spring. These facilities are listed in Table A-12 and can be found on Figure A-6.

**East Silver Spring Community Facilities**

| <b>Facility Name</b>                     | <b>Type of Facility</b> |
|------------------------------------------|-------------------------|
| Clifton Park Baptist Church              | Religious               |
| Eastern Middle School                    | Educational             |
| Highland View Elementary School          | Educational             |
| Sligo Creek Park                         | Recreational            |
| Long Branch Community Center             | Recreational            |
| Long Branch Park                         | Recreational            |
| Northwest Branch Stream Valley Park      | Recreational            |
| Montgomery Knolls Elementary School      | Educational             |
| Mt. Jezreel Baptist Church               | Religious               |
| Oakview Elementary School                | Educational             |
| Silver Spring Church of Christ           | Religious               |
| Silver Spring United Presbyterian Church | Religious               |

Sources: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Montgomery County Department of Technology Services Geographic Information Systems, 2007

#### **A.6.4.      *Access and Mobility***

The East Silver Spring neighborhood is served by Metrobus and Ride On. Major bus lines in the neighborhood operate along University Boulevard and Wayne Avenue.

Major roadways through the neighborhood include Sligo Creek Parkway, University Boulevard, and Flower Avenue, which generally run northwest and southeast, and Colesville Road, Franklin Avenue, Wayne Avenue, and Piney Branch Road, which generally run southwest to northeast.

The neighborhood also contains many paths that access the Sligo Creek Stream Valley Trail, the Long Branch Trail, and the Northwest Branch Stream Valley Trail systems.

The percentage of the neighborhood's population that uses some type of public transportation to commute to work (19 percent) is slightly less than the entire study area (21 percent). The percentage of the neighborhood's households with no vehicle available is close to 12 percent.



### A.6.5. *Population and Employment Projections*

The population and employment figures for East Silver Spring include the Long Branch Neighborhood. Neither population nor employment is expected appreciably to grow between 2000 and 2030.

| Population |        |                                      | Employment |       |                                      |
|------------|--------|--------------------------------------|------------|-------|--------------------------------------|
| 2000       | 2030   | Projected Total Change<br>(% Change) | 2000       | 2030  | Projected Total Change<br>(% Change) |
| 14,763     | 14,846 | +83 (+1%)                            | 1,068      | 1,107 | +39 (+4%)                            |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

Retail and other employment are the most common employment sectors in East Silver Spring and Long Branch and will continue to be so in 2030.

| Employment Sector |      |                   |      |                       |      |                  |      |
|-------------------|------|-------------------|------|-----------------------|------|------------------|------|
| Office Employment |      | Retail Employment |      | Industrial Employment |      | Other Employment |      |
| 2000              | 2030 | 2000              | 2030 | 2000                  | 2030 | 2000             | 2030 |
| 70                | 71   | 516               | 535  | 27                    | 26   | 455              | 475  |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

## A.7. *Long Branch Characteristics*

The Long Branch neighborhood is in Montgomery County between the Silver Spring, East Silver Spring, and Takoma Park neighborhoods. It is bounded by Piney Branch Road to the south, Sligo Creek to the west, Wayne Avenue to the north, and Long Branch Creek to the east (see Figure A-7). Long Branch is located in an unincorporated area within the Silver Spring CDP.

Long Branch is a suburban neighborhood consisting of single-family houses, garden-style apartment buildings, with an area of shops and restaurants along Flower Avenue and Piney Branch Road.

### A.7.1. *Population*

As shown in Table A-13, Long Branch features a substantially higher percentage of Hispanics people (37 percent) than the study area (24 percent), Montgomery County (12 percent), and the Montgomery County portion of the study area (20 percent). Likewise, linguistically isolated households represent nearly 19 percent of the neighborhood, which is higher than the study area (about 13 percent), Montgomery County (approximately 6 percent), and the Montgomery County portion of the study area (10 percent). The median annual household income is \$44,390.



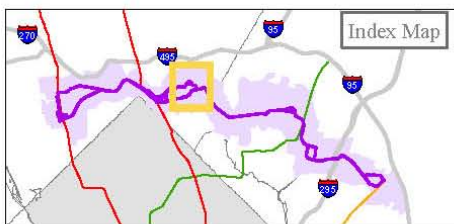
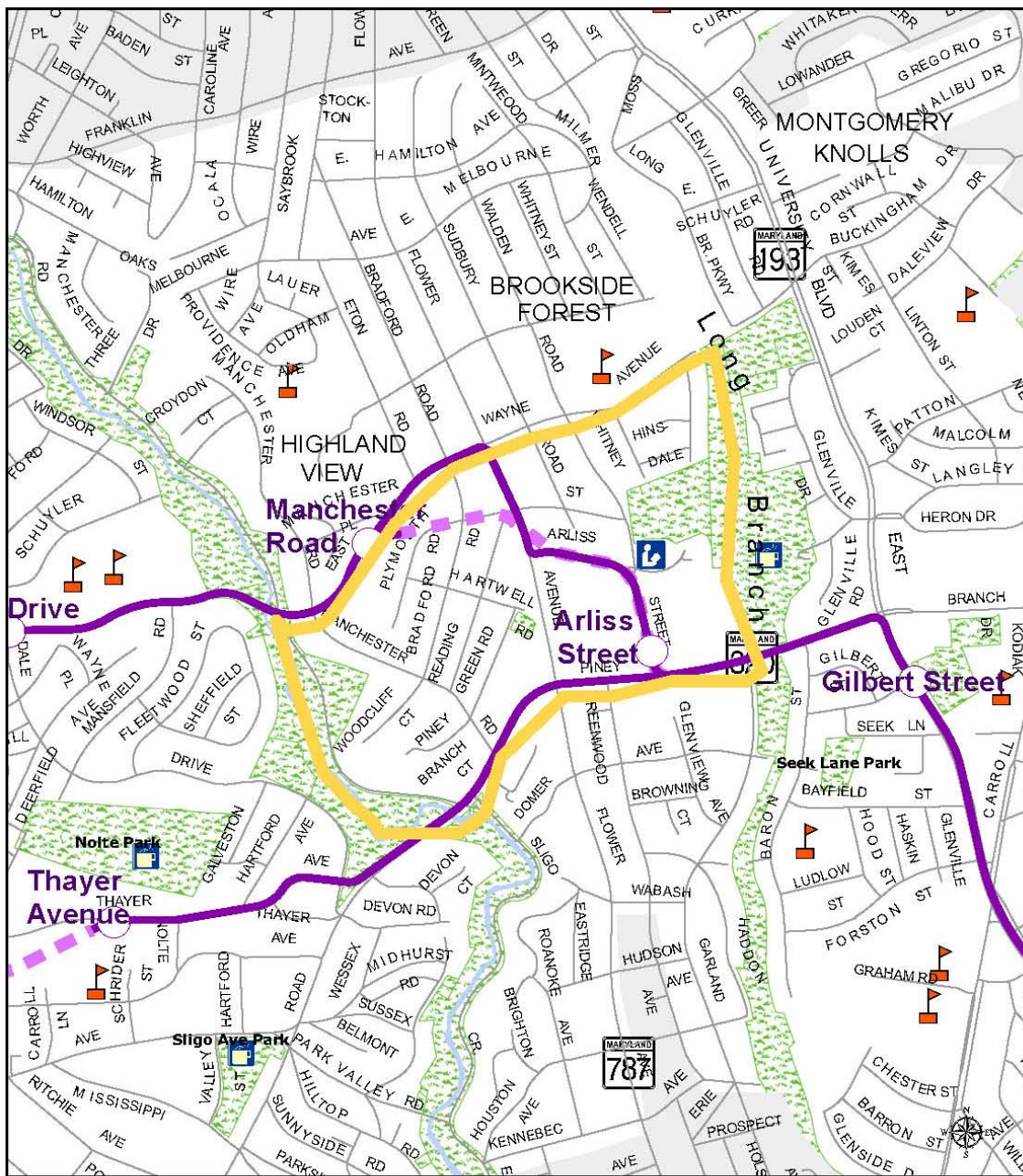
#### **A.7.2.      *Housing***




The neighborhood is suburban consisting of single-family houses along Bradford and Reading Roads. Several apartment complexes are along Plymouth, Bradford, and Piney Branch Roads, including the Flower Apartments near the intersection of Flower Avenue and Piney Branch. A recently built townhouse development lies west of Manchester Road, near Geren and Bradford Roads. Approximately 67 percent of the households in the neighborhood are renter-occupied compared to the study area (60 percent), Montgomery County (31 percent), and Montgomery County portion of the study area (63 percent).

#### **A.7.3.      *Community Facilities and Services***

Several community facilities and services were identified within the Long Branch neighborhood. These facilities are listed in Table A-14 and can be found on Figure A-7.

## Long Branch Neighborhood Map



| Purple Line                                                                                            |                                                                                                      | Community Profiles                                                                                |                                                                                               |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Figure A-7 Long Branch                                                                                 |                                                                                                      |                                                                                                   |                                                                                               |
| Legend                                                                                                 |                                                                                                      |                                                                                                   |                                                                                               |
|  Proposed Stations  |  Civic            |  Library     |  Schools |
|  Proposed Alignment |  Community Center |  Police      |  Parks   |
|  Proposed Tunnel    |  Fire Station     |  Post Office |                                                                                               |
|  WMATA Metrorail    |  Historic         |  Recreation  |                                                                                               |
|  MARC Commuter Rail |  Hospital         |  Worship     |                                                                                               |

Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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### Long Branch Demographics

| Category                                              | Neighborhood | Montgomery County Portion of the Study Area | Study Area | Montgomery County |
|-------------------------------------------------------|--------------|---------------------------------------------|------------|-------------------|
| Population                                            | 3,783        | 71,762                                      | 140,981    | 873,341           |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                             |            |                   |
| White only                                            | 31%          | 51%                                         | 46%        | 65%               |
| African-American or Black only                        | 31%          | 27%                                         | 31%        | 15%               |
| American Indian/Native Alaskan only                   | <1%          | <1%                                         | 1%         | <1%               |
| Asian                                                 | 8%           | 7%                                          | 6%         | 11%               |
| Native Hawaiian/Pacific Islander only                 | 1%           | <1%                                         | <1%        | <1%               |
| Other Race                                            | 24%          | 10%                                         | 11%        | 5%                |
| Two or More Races                                     | 6%           | 5%                                          | 5%         | 4%                |
| Hispanic Population                                   | 37%          | 20%                                         | 24%        | 12%               |
| Median Household Income                               | \$44,390     | \$51,208                                    | \$48,812   | \$71,551          |
| People Living Below Poverty                           | 11%          | 9%                                          | 11.7%      | 5.4%              |
| Linguistically Isolated Households                    | 19%          | 10%                                         | 12.5%      | 6.2%              |
| Using Public Transportation to Work                   | 30%          | 26%                                         | 21%        | 13%               |
| Households with No Vehicle Available                  | 18%          | 7.5%                                        | 17%        | 7.5%              |
| Housing Units                                         | 1,454        | 31,596                                      | 52,328     | 334,632           |
| Owner-Occupied Households                             | 33%          | 37%                                         | 40%        | 69%               |
| Renter-Occupied Households                            | 67%          | 63%                                         | 60%        | 31%               |
| Vacant Residences                                     | 2.5%         | 3%                                          | 3.8%       | 3.0%              |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The U.S. Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

### Long Branch Community Facilities

| Facility Name                   | Type of Facility |
|---------------------------------|------------------|
| Flower Avenue Park              | Recreational     |
| Long Branch Library             | Library          |
| Long Branch Neighborhood Park   | Recreational     |
| Long Branch Recreational Center | Recreational     |
| Sligo Creek Park                | Recreational     |

Sources: ADC Greater Washington, D.C., 8<sup>th</sup> Edition, Montgomery County Department of Technology Services Geographic Information Systems, 2007

#### **A.7.4.      *Access and Mobility***

Long Branch is served by Metrobus and Ride On. Major bus lines in the neighborhood operate along Piney Branch Road and Flower Avenue.

Major arterials include Sligo Creek Parkway and Flower Avenue, which generally run northwest and southeast, and Wayne Avenue and Piney Branch Road, which generally run southwest to northeast.

The percentage of the neighborhood's population (30 percent) that uses some type of public transportation to commute to work is greater than the study area (21 percent), Montgomery County (13 percent), and Montgomery County portion of the study area (26 percent). The percentage of the neighborhood's households with no vehicle available (almost 18 percent) is more than the study area (17 percent), and Montgomery County and the Montgomery County portion of the study area (both about 8 percent).

#### **A.7.5.      *Population and Employment Projections***

Please see Section 7.1.6, East Silver Spring, for population and employment projections for Long Branch.

### **A.8.      *Takoma Park Characteristics***

The Takoma Park neighborhood is located primarily in Montgomery County, although it includes the Carole Highlands and Hillwood Manor communities in Prince George's County. It also includes the primarily residential portions of the incorporated city of Takoma Park and unincorporated areas west of Sligo Creek (see Figure A-8). It is generally located south of Piney Branch Road and west of University Boulevard.

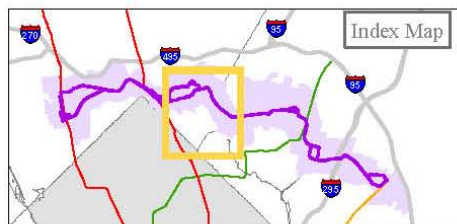
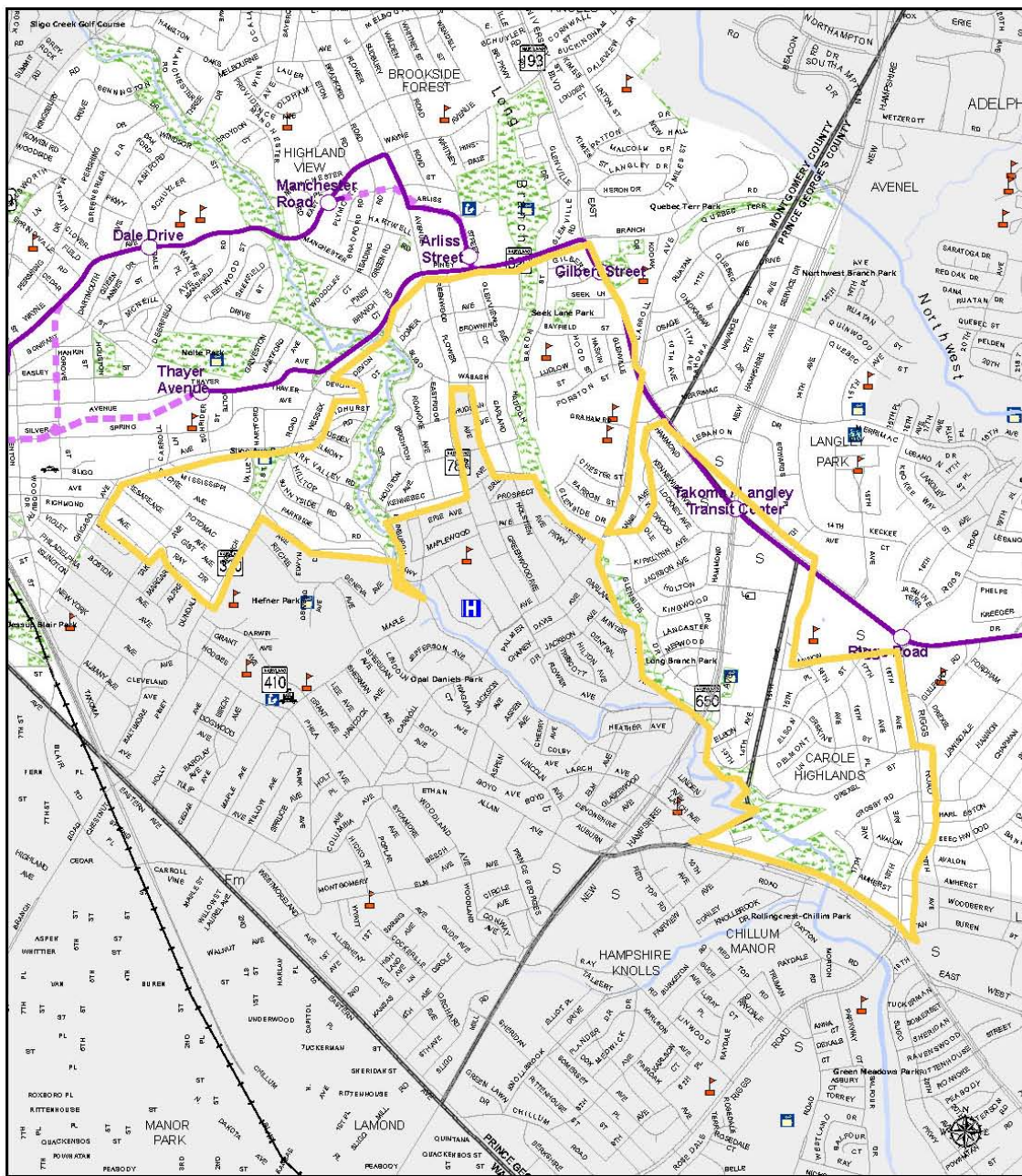
The neighborhood is predominately residential and consists of interconnected curvilinear streets with a mixture of single-family and multi-family dwellings. Stream valley parks, such as Sligo Creek Park and Long Branch Park, divide residential areas. Commercial areas are located on the most heavily traveled roads: University Boulevard, New Hampshire Avenue, Piney Branch Road, and Carroll Avenue.

#### **A.8.1.      *Population***

Takoma Park is racially diverse (see Table A-15). Additionally, the neighborhood has a large, growing Hispanic population (35 percent), which is greater than that of the study area (24 percent), the Montgomery County portion of the study area (20 percent), and Montgomery County as a whole (12 percent). Approximately 15 percent of households are considered linguistically isolated, and more than 12 percent of the population lives below poverty. The median annual household income is \$46,282 which is similar to the study area's median household income.



## Takoma Park Neighborhood Map



| Purple Line                                                                         |                    | Community Profiles                                                                    |                  |
|-------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------|------------------|
| Figure A-8 Takoma Park                                                              |                    |                                                                                       |                  |
| Legend                                                                              |                    |                                                                                       |                  |
|  | Proposed Stations  |    | Civic            |
|  | Proposed Alignment |    | Community Center |
|  | Proposed Tunnel    |    | Fire Station     |
|  | WMATA Metrorail    |    | Historic         |
|  | MARC Commuter Rail |    | Hospital         |
|                                                                                     |                    |  | Library          |
|                                                                                     |                    |  | Police           |
|                                                                                     |                    |  | Post Office      |
|                                                                                     |                    |  | Recreation       |
|                                                                                     |                    |  | Worship          |
|                                                                                     |                    |  | Schools          |
|                                                                                     |                    |  | Parks            |

Source: SHA, Md Department of Assessments and Taxation, MNCPFC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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### Takoma Park Demographics

| Category                                              | Neighborhood | Montgomery County Portion of the Study Area | Study Area | Montgomery County |
|-------------------------------------------------------|--------------|---------------------------------------------|------------|-------------------|
| Population                                            | 12,615       | 71,762                                      | 140,981    | 873,341           |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                             |            |                   |
| White only                                            | 37%          | 51%                                         | 46%        | 65%               |
| African-American or Black only                        | 29%          | 27%                                         | 31%        | 15%               |
| American Indian/Native Alaskan only                   | <1%          | <1%                                         | 1%         | <1%               |
| Asian                                                 | 6%           | 7%                                          | 6%         | 11%               |
| Native Hawaiian/Pacific Islander only                 | <1%          | <1%                                         | <1%        | <1%               |
| Other Race                                            | 21%          | 10%                                         | 11%        | 5%                |
| Two or More Races                                     | 7%           | 5%                                          | 5%         | 4%                |
| Hispanic Population                                   | 35%          | 20%                                         | 24%        | 12%               |
| Median Household Income                               | \$46,282     | \$51,208                                    | \$48,812   | \$71,551          |
| People Living Below Poverty                           | 12%          | 9%                                          | 11.7%      | 5.4%              |
| Linguistically Isolated Households                    | 15%          | 10%                                         | 12.5%      | 6.2%              |
| Using Public Transportation to Work                   | 25%          | 26%                                         | 21%        | 13%               |
| Households with No Vehicle Available                  | 16%          | 7.5%                                        | 17%        | 7.5%              |
| Housing Units                                         | 4,628        | 31,596                                      | 52,328     | 334,632           |
| Owner-Occupied Households                             | 40%          | 37%                                         | 40%        | 69%               |
| Renter-Occupied Households                            | 60%          | 63%                                         | 60%        | 31%               |
| Vacant Residences                                     | 3.3%         | 3%                                          | 3.8%       | 3.0%              |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The U.S. Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

#### A.8.2. *Housing*

Takoma Park is predominantly residential with a mix of single-family houses, duplexes, and mid-to-high rise apartment buildings. The area is primarily built out, although many houses are being enlarged and infill development still occurs. Approximately 60 percent of households in the neighborhood are renter-occupied.

#### A.8.3. *Community Facilities and Services*

Several community facilities and services were identified within the Takoma Park neighborhood. These facilities are listed in Table A-16 and can be found on Figure A-8.





### Takoma Park Community Facilities

| Facility Name                                   | Type of Facility |
|-------------------------------------------------|------------------|
| Bright Light Baptist Church                     | Religious        |
| The Church of Jesus Christ of Latter Day Saints | Religious        |
| Columbia Union College                          | Educational      |
| Hillwood Manor Park                             | Recreational     |
| Inglesia Adventista Del Septimo Dia             | Religious        |
| Inglesia Christiana Canaan Church               | Religious        |
| Langley Park Post Office                        | Post Office      |
| Long Branch Park                                | Recreational     |
| New Hampshire Estates Park                      | Recreational     |
| Piney Branch Elementary School                  | Educational      |
| Rolling Terrace Elementary School               | Educational      |
| Seek Lane Park                                  | Recreational     |
| Sligo Seventh Day Adventist Elementary School   | Educational      |
| Sligo Avenue Community Center                   | Recreational     |
| Sligo Avenue Neighborhood Park                  | Recreational     |
| Sligo Park                                      | Recreational     |
| Takoma Academy                                  | Educational      |
| Takoma Park                                     | Recreational     |
| Takoma Park Community Center                    | Recreational     |
| Takoma Park Elementary School                   | Educational      |
| Takoma Park Neighborhood Park                   | Recreational     |
| Trinity Baptist Church                          | Religious        |
| Turner Memorial AME Church                      | Religious        |
| Washington Adventist Hospital                   | Hospital         |

Sources: ADC Greater Washington, D.C., 8<sup>th</sup> Edition, Montgomery County Department of Technology Services Geographic Information Systems, 2007

#### ***A.8.4. Access and Mobility***

Takoma Park is served by Metrobus and Ride On. Major bus lines in the neighborhood operate along arterial roadways, including University Boulevard, Riggs Road, and New Hampshire Avenue.

One-quarter of the neighborhood's population uses some type of public transportation to commute to work. The percentage of the neighborhood's households with no vehicle available (over 16 percent) is similar to the study area (17 percent). The MTA and Montgomery and Prince George's Counties are constructing a transit center at University Boulevard and New Hampshire Avenue. The Takoma/Langley Transit Center will provide a centralized station for the many bus routes in the area. The transit center would be a stop on the Purple Line.

#### ***A.8.5. Population and Employment Projections***

Takoma Park is not anticipated to experience population growth and to experience only limited employment growth between 2000 and 2030.

| Population |        |                                      | Employment |       |                                      |
|------------|--------|--------------------------------------|------------|-------|--------------------------------------|
| 2000       | 2030   | Projected Total Change<br>(% Change) | 2000       | 2030  | Projected Total Change<br>(% Change) |
| 11,968     | 12,096 | +128 (+1%)                           | 4,383      | 4,687 | +304 (+7%)                           |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

The largest sector in Takoma Park is other employment; this is not expected to change by 2030.

| Employment Sector |      |                   |       |                       |      |                  |       |
|-------------------|------|-------------------|-------|-----------------------|------|------------------|-------|
| Office Employment |      | Retail Employment |       | Industrial Employment |      | Other Employment |       |
| 2000              | 2030 | 2000              | 2030  | 2000                  | 2030 | 2000             | 2030  |
| 595               | 639  | 1,312             | 1,461 | 80                    | 81   | 2,396            | 2,506 |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

## A.9. Langley Park Characteristics

Langley Park is located primarily in Prince George's County. Two of the 10 census block groups that form the neighborhood boundary are in Montgomery County. It is generally located south of Piney Branch Road and the Northwest Branch of the Anacostia River, west of Riggs Road, and north and east of University Boulevard (see Figure A-9). Langley Park is a CDP within an unincorporated area. The Langley Park CDP's boundaries roughly coincide with the Langley Park neighborhood boundary used in this analysis.

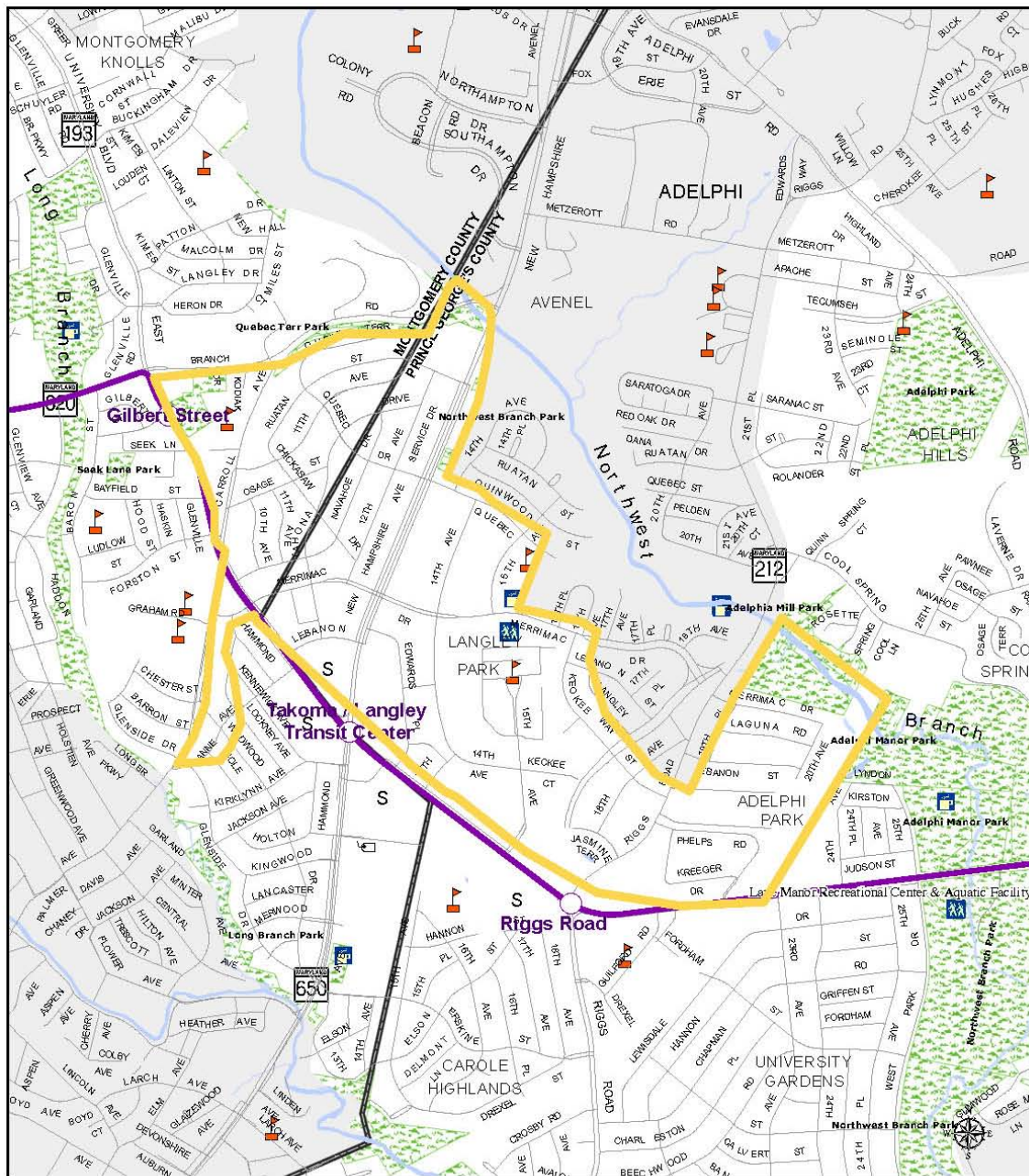
University Boulevard, commonly referred to as the "International Corridor" in the Langley Park area, contains restaurants, shops, and services that cater to a large immigrant population. The Northwest Stream Valley Park in the northern portion of the neighborhood provides ballfields, playgrounds, trails, and other recreational opportunities. The Langley Park CDP has the highest population density in Prince George's County.

### A.9.1. Population

As shown in Table A-17, the Langley Park neighborhood has a much larger Hispanic population (62 percent) than the Prince George's County portion of the study area (28 percent) or the study area (24 percent). Linguistically isolated households represent 40 percent of the 5,229 households. More than 17 percent of the population lives below the poverty threshold. Likewise, the median household income (\$39,531) is lower than the study area median household income (\$48,812).



## Langley Park Neighborhood Map



| Purple Line                                                                         |                    | Community Profiles                                                                    |             |
|-------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------|-------------|
| Figure A-9 Langley Park                                                             |                    |                                                                                       |             |
| Legend                                                                              |                    |                                                                                       |             |
|  | Proposed Stations  |    | Civic       |
|  | Proposed Alignment |  | Library     |
|  | Proposed Tunnel    |  | Police      |
|  | WMATA Metrorail    |  | Post Office |
|  | MARC Commuter Rail |  | Recreation  |
|                                                                                     |                    |  | Worship     |
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Source: SHA, Md Department of Assessment and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

August 2008

### Langley Park Demographics

| Category                                              | Neighborhood | Prince George's<br>County Portion<br>of the Study<br>Area | Study Area | Prince<br>George's<br>County |
|-------------------------------------------------------|--------------|-----------------------------------------------------------|------------|------------------------------|
| Population                                            | 17,812       | 69,219                                                    | 140,981    | 801,515                      |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                                           |            |                              |
| White only                                            | 40%          | 40%                                                       | 46%        | 27%                          |
| African-American or Black only                        | 26%          | 37%                                                       | 31%        | 63%                          |
| American Indian/Native Alaskan<br>only                | <1%          | 1%                                                        | 1%         | <1%                          |
| Asian                                                 | 5%           | 5%                                                        | 6%         | 4%                           |
| Native Hawaiian/Pacific Islander<br>only              | <1%          | 0%                                                        | <1%        | <1%                          |
| Other Race                                            | 23%          | 12%                                                       | 11%        | 4%                           |
| Two or More Races                                     | 6%           | 5%                                                        | 5%         | 3%                           |
| Hispanic Population                                   | 62%          | 28%                                                       | 24%        | 7%                           |
| Median Household Income                               | \$39,531     | \$44,937                                                  | \$48,812   | \$55,256                     |
| People Living Below Poverty                           | 18%          | 14.6%                                                     | 11.7%      | 7.7%                         |
| Linguistically Isolated Households                    | 40%          | 16%                                                       | 12.5%      | 3.5%                         |
| Using Public Transportation to Work                   | 21%          | 16%                                                       | 21%        | 12%                          |
| Households with No Vehicle<br>Available               | 28%          | 16%                                                       | 17%        | 10.5%                        |
| Housing Units                                         | 5,229        | 20,716                                                    | 52,328     | 302,378                      |
| Owner-Occupied Households                             | 21%          | 45%                                                       | 40%        | 62%                          |
| Renter-Occupied Households                            | 79%          | 55%                                                       | 60%        | 38%                          |
| Vacant Residences                                     | 2.8%         | 4.5%                                                      | 3.8%       | 5.2%                         |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The federal government defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

#### A.9.2. ***Housing***

Housing in Langley Park consists of single-family houses, duplexes, and garden-style apartment complexes, primarily built following World War II through the 1960s. Large apartment complexes are generally located on or near University Boulevard or New Hampshire Avenue. Clusters of duplexes and single-family houses are located farther from the major arterials and closer to Northwest Branch Stream Valley Park. Approximately 79 percent of households in the neighborhood are renter-occupied compared to 55 percent for the Prince George's County portion of the study area, 60 percent for the entire study area, and 38 percent for Prince George's County.



#### **A.9.3. Community Facilities and Services**

Several community facilities and services were identified within Langley Park. These facilities are listed in Table A-18 and can be found on Figure A-9.

**Langley Park Community Facilities**

| <b>Facility Name</b>                     | <b>Type of Facility</b> |
|------------------------------------------|-------------------------|
| Chillum-Adelphi Fire Co. #34             | Fire /Emergency         |
| Langley Park-McCormick Elementary School | Educational             |
| Langley Park Community Center            | Recreational            |
| Langley Park Boys and Girls Club         | Recreational            |
| New Hampshire Estates Elementary School  | Educational             |
| Northwest Branch Stream Valley Park      | Recreational            |
| St. Michael's and All Angels Episcopal   | Religious               |
| Willowbrook Montessori School            | Educational             |

Sources: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Montgomery County Department of Technology Services Geographic Information Systems, 2007

#### **A.9.4. Access and Mobility**

Langley Park is served by Metrobus and TheBus. Bus lines in the neighborhood operate primarily along University Boulevard, Riggs Road, and New Hampshire Avenue. In addition, one pedestrian and bicycle trail, the Northwest Branch Trail, connects the neighborhood to northwestern Montgomery County and to the Anacostia Tributaries Trail System in Prince George's County. Approximately 21 percent of the population uses some type of public transportation to commute to work, which is consistent with the percentage of study area residents that use public transportation. However, the percentage of the neighborhood's households with no vehicle available (28 percent) is higher than the Prince George's County portion of the study area (16 percent), the entire study area (17 percent), or Prince George's County (11 percent).

The neighborhood has high pedestrian traffic, particularly near the intersection of University Boulevard and New Hampshire Avenue which is a transfer point for many bus routes. The neighborhood has a high pedestrian accident rate, and recent safety improvements have been undertaken to improve sidewalks and crosswalks along University Boulevard. As discussed in the section on Takoma Park, the Takoma/Langley Transit Center will improve pedestrian and transit connections near the intersection of New Hampshire Avenue and University Boulevard.

#### **A.9.5. Population and Employment Projections**

Between 2000 and 2030 the population in Langley Park is not expected to grow, however employment is expected to increase by 22 percent.

| Population |        |                                      | Employment |       |                                      |
|------------|--------|--------------------------------------|------------|-------|--------------------------------------|
| 2000       | 2030   | Projected Total Change<br>(% Change) | 2000       | 2030  | Projected Total Change<br>(% Change) |
| 19,376     | 19,582 | +206 (+1%)                           | 2,629      | 3,207 | +578 (+22%)                          |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

Retail is the largest employment sector in Langley Park and will remain so in 2030.

| Employment Sector |      |                   |       |                       |      |                  |      |
|-------------------|------|-------------------|-------|-----------------------|------|------------------|------|
| Office Employment |      | Retail Employment |       | Industrial Employment |      | Other Employment |      |
| 2000              | 2030 | 2000              | 2030  | 2000                  | 2030 | 2000             | 2030 |
| 389               | 460  | 1,665             | 2,061 | 93                    | 115  | 482              | 571  |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

## A.10. Lewisdale Characteristics

The Lewisdale neighborhood is in Prince George's County. It is bisected by University Boulevard and is generally located west of Northwest Branch Stream Valley Park and east of Takoma Park (see Figure A-10). Lewisdale is part of an unincorporated area. The portion of Lewisdale south of University Boulevard is part of the Chillum CDP, and the portion north of University Boulevard is part of the Adelphi CDP.

The neighborhood area is entirely residential with the exception of one commercial area, a strip shopping center on the north side of University Boulevard. The neighborhood offers numerous recreational opportunities in the adjacent Northwest Branch Stream Valley Park, including playgrounds, ballfields, tennis courts, archery, picnic areas, hiking, biking, and a swimming pool.

### A.10.1. Population

Table A-19 demonstrates that the Black population makes up approximately half of the neighborhood. The other half of the population is racially diverse. The neighborhood includes a higher percentage of Hispanics (33 percent) than the Prince George's County portion of the study area (28 percent), the study area (24 percent), or Prince George's County (7 percent). Linguistically isolated households represent 14.8 percent of total households in the neighborhood, and the median annual household income is \$52,310 compared to a median of \$48,812 for the study area.

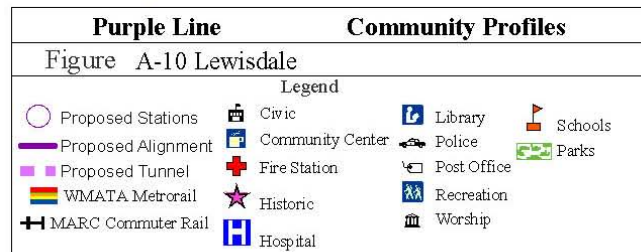
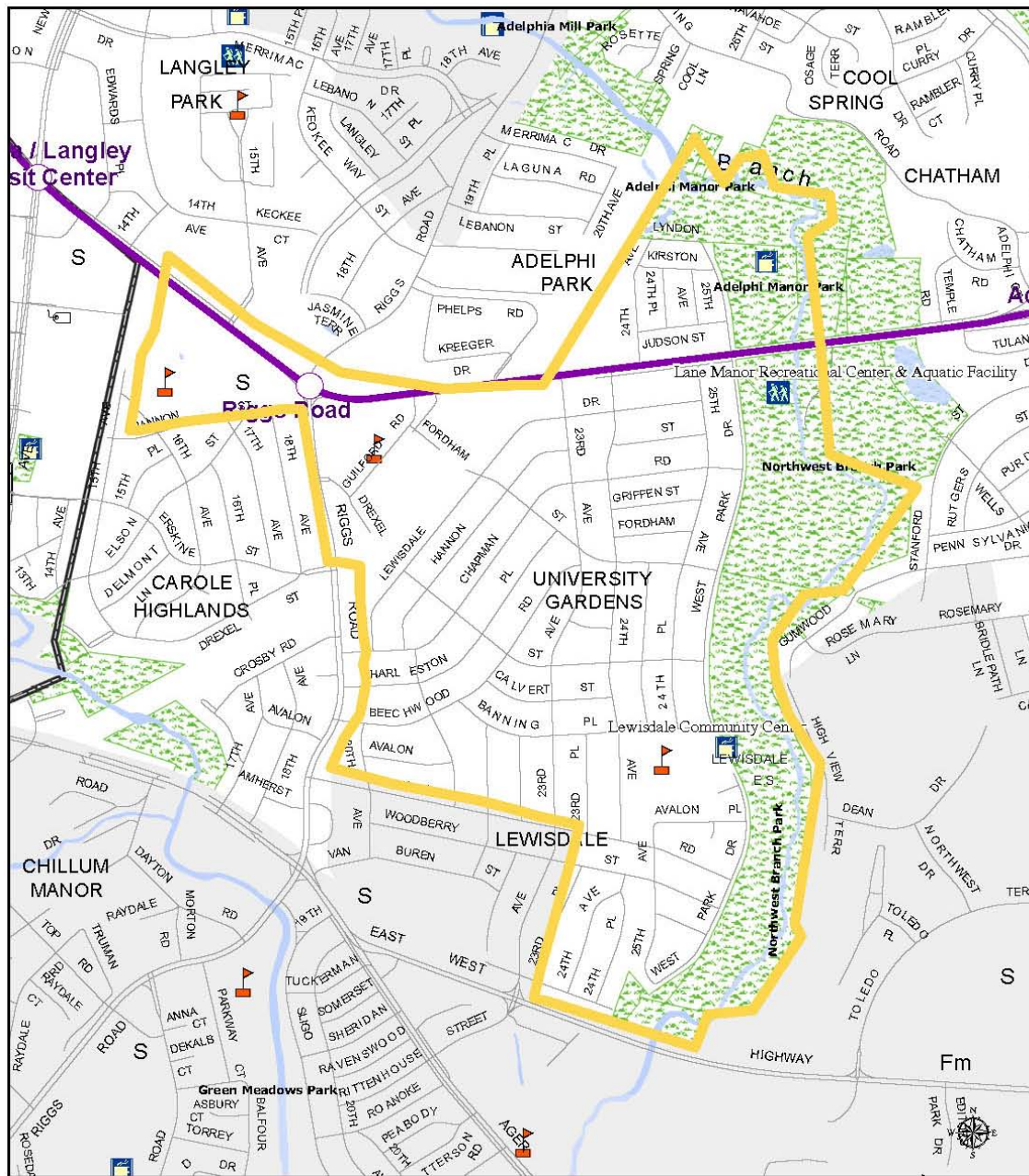
### A.10.2. Housing

Housing in Lewisdale consists of single-family houses and duplexes dispersed throughout the community on a system of curvilinear streets on a loose grid. Sixty-one percent of the households are owner-occupied compared to 40 percent for the study area.





## Lewisdale Neighborhood Map



Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

August 2008

### Lewisdale Demographics

| Category                                              | Neighborhood | Prince George's<br>County Portion<br>of the Study<br>Area | Study<br>Area | Prince<br>George's<br>County |
|-------------------------------------------------------|--------------|-----------------------------------------------------------|---------------|------------------------------|
| Population                                            | 8,070        | 69,219                                                    | 140,981       | 801,515                      |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                                           |               |                              |
| White only                                            | 19%          | 40%                                                       | 46%           | 27%                          |
| African-American or Black only                        | 48%          | 37%                                                       | 31%           | 63%                          |
| American Indian/Native Alaskan<br>only                | <1%          | 1%                                                        | 1%            | <1%                          |
| Asian                                                 | 6%           | 5%                                                        | 6%            | 4%                           |
| Native Hawaiian/Pacific Islander<br>only              | <1%          | 0%                                                        | <1%           | <1%                          |
| Other Race                                            | 18%          | 12%                                                       | 11%           | 4%                           |
| Two or More Races                                     | 8%           | 5%                                                        | 5%            | 3%                           |
| Hispanic Population                                   | 33%          | 28%                                                       | 24%           | 7%                           |
| Median Household Income                               | \$52,310     | \$44,937                                                  | \$48,812      | \$55,256                     |
| People Living Below Poverty                           | 7%           | 14.6%                                                     | 11.7%         | 7.7%                         |
| Linguistically Isolated Households                    | 15%          | 16%                                                       | 12.5%         | 3.5%                         |
| Using Public Transportation to<br>Work                | 20%          | 16%                                                       | 21%           | 12%                          |
| Households with No Vehicle<br>Available               | 13%          | 16%                                                       | 17%           | 10.5%                        |
| Housing Units                                         | 2,576        | 20,716                                                    | 52,328        | 302,378                      |
| Owner-Occupied Households                             | 61%          | 45%                                                       | 40%           | 62%                          |
| Renter-Occupied Households                            | 39%          | 55%                                                       | 60%           | 38%                          |
| Vacant Residences                                     | 4.5%         | 4.5%                                                      | 3.8%          | 5.2%                         |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The U.S. Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

#### ***A.10.3. Community Facilities and Services***

Several community facilities and services were identified within the Lewisdale neighborhood. These facilities are listed in Table A-20 and can be found on Figure A-10.





### Lewisdale Community Facilities

| Facility Name                                       | Type of Facility |
|-----------------------------------------------------|------------------|
| Adelphi Manor Community Center                      | Recreational     |
| Carole Highlands Elementary School                  | Educational      |
| Trinity Baptist Church                              | Religious        |
| Lewisdale Community Center                          | Recreational     |
| Lewisdale Elementary                                | Educational      |
| Lane Manor Recreational Center and Aquatic Facility | Recreational     |
| Northwest Stream Valley Park                        | Recreational     |
| Maryland Drafting Institute                         | Educational      |

Sources: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Prince George's County Office of Information and Communications, Geographic Information Systems, 2007

#### A.10.4. Access and Mobility

The Lewisdale neighborhood is served by Metrobus and TheBus. Major bus lines in the neighborhood operate along major arterial and connector roadways, including University Boulevard, Riggs Road, and 23<sup>rd</sup> Avenue.

The percentage of the neighborhood's population (20 percent) that uses some type of public transportation to commute to work is similar to the study area (21 percent), the Prince George's County portion of the study area (16 percent), and Prince George's County (12 percent). The percentage of the neighborhood's households with no vehicle available (13 percent) is less than the study area (17 percent), but more than Prince George's County (11 percent).

#### A.10.5. Population and Employment Projections

The population of Lewisdale is expected to remain stable, but employment is expected to increase substantially by 2030.

| Population |       |                                      | Employment |       |                                      |
|------------|-------|--------------------------------------|------------|-------|--------------------------------------|
| 2000       | 2030  | Projected Total Change<br>(% Change) | 2000       | 2030  | Projected Total Change<br>(% Change) |
| 6,999      | 6,984 | -15 (-0.2%)                          | 791        | 1,072 | +281 (+36%)                          |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

The major employment sector in Lewisdale is expected to continue to be Other Employment by 2030.

| Employment Sector |      |                   |      |                       |      |                  |      |
|-------------------|------|-------------------|------|-----------------------|------|------------------|------|
| Office Employment |      | Retail Employment |      | Industrial Employment |      | Other Employment |      |
| 2000              | 2030 | 2000              | 2030 | 2000                  | 2030 | 2000             | 2030 |
| 140               | 178  | 265               | 392  | 21                    | 29   | 365              | 473  |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

## **A.11. Adelphi Characteristics**

The Adelphi neighborhood is in Prince George's County. It is generally located east of Riggs Road and west of Adelphi Road, and is bisected by University Boulevard. The Adelphi neighborhood is mostly unincorporated except for a small area north of Calverton which is incorporated as part of Hyattsville. The Adelphi neighborhood lies within the Adelphi and Langley Park CDPs (see Figure A-11).

Adelphi is primarily a residential area, particularly for students, faculty, and staff of the University of Maryland. A small commercial shopping center is located in the northern portion of the neighborhood. Two parks, Northwest Branch Stream Valley Park and Adelphi Park, provide recreational opportunities. The National Archives are located in Adelphi.

### ***A.11.1. Population***

Approximately half of the neighborhood is White as is shown in Table A-21. The neighborhood also has the highest proportion of Asian residents (14 percent) within the study area. The neighborhood's population is 20 percent Hispanic. Nearly 17 percent of neighborhood households are linguistically isolated. The median annual household income is \$49,531, which is consistent with the study area median household income of \$48,812.



### Adelphi Demographics

| Category                                              | Neighborhood | Prince George's<br>County Portion<br>of the Study<br>Area | Study<br>Area | Prince<br>George's<br>County |
|-------------------------------------------------------|--------------|-----------------------------------------------------------|---------------|------------------------------|
| Population                                            | 3,438        | 69,219                                                    | 140,981       | 801,515                      |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                                           |               |                              |
| White only                                            | 46%          | 40%                                                       | 46%           | 27%                          |
| African-American or Black only                        | 24%          | 37%                                                       | 31%           | 63%                          |
| American Indian/Native Alaskan only                   | <1%          | 1%                                                        | 1%            | <1%                          |
| Asian                                                 | 14%          | 5%                                                        | 6%            | 4%                           |
| Native Hawaiian/Pacific Islander only                 | <1%          | 0%                                                        | <1%           | <1%                          |
| Other Race                                            | 11%          | 12%                                                       | 11%           | 4%                           |
| Two or More Races                                     | 5%           | 5%                                                        | 5%            | 3%                           |
| Hispanic Population                                   | 20%          | 28%                                                       | 24%           | 7%                           |
| Median Household Income                               | \$49,531     | \$44,937                                                  | \$48,812      | \$55,256                     |
| People Living Below Poverty                           | 13%          | 15%                                                       | 12%           | 8%                           |
| Linguistically Isolated Households                    | 17%          | 16%                                                       | 13%           | 4%                           |
| Using Public Transportation to Work                   | 15%          | 16%                                                       | 21%           | 12%                          |
| Households with No Vehicle Available                  | 9%           | 16%                                                       | 17%           | 11%                          |
| Housing Units                                         | 2,047        | 20,716                                                    | 52,328        | 302,378                      |
| Owner-Occupied Households                             | 53%          | 45%                                                       | 40%           | 62%                          |
| Renter-Occupied Households                            | 47%          | 55%                                                       | 60%           | 38%                          |
| Vacant Residences                                     | 3%           | 5%                                                        | 4%            | 5%                           |

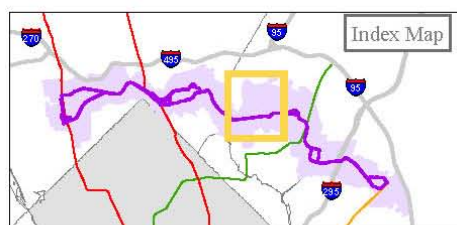
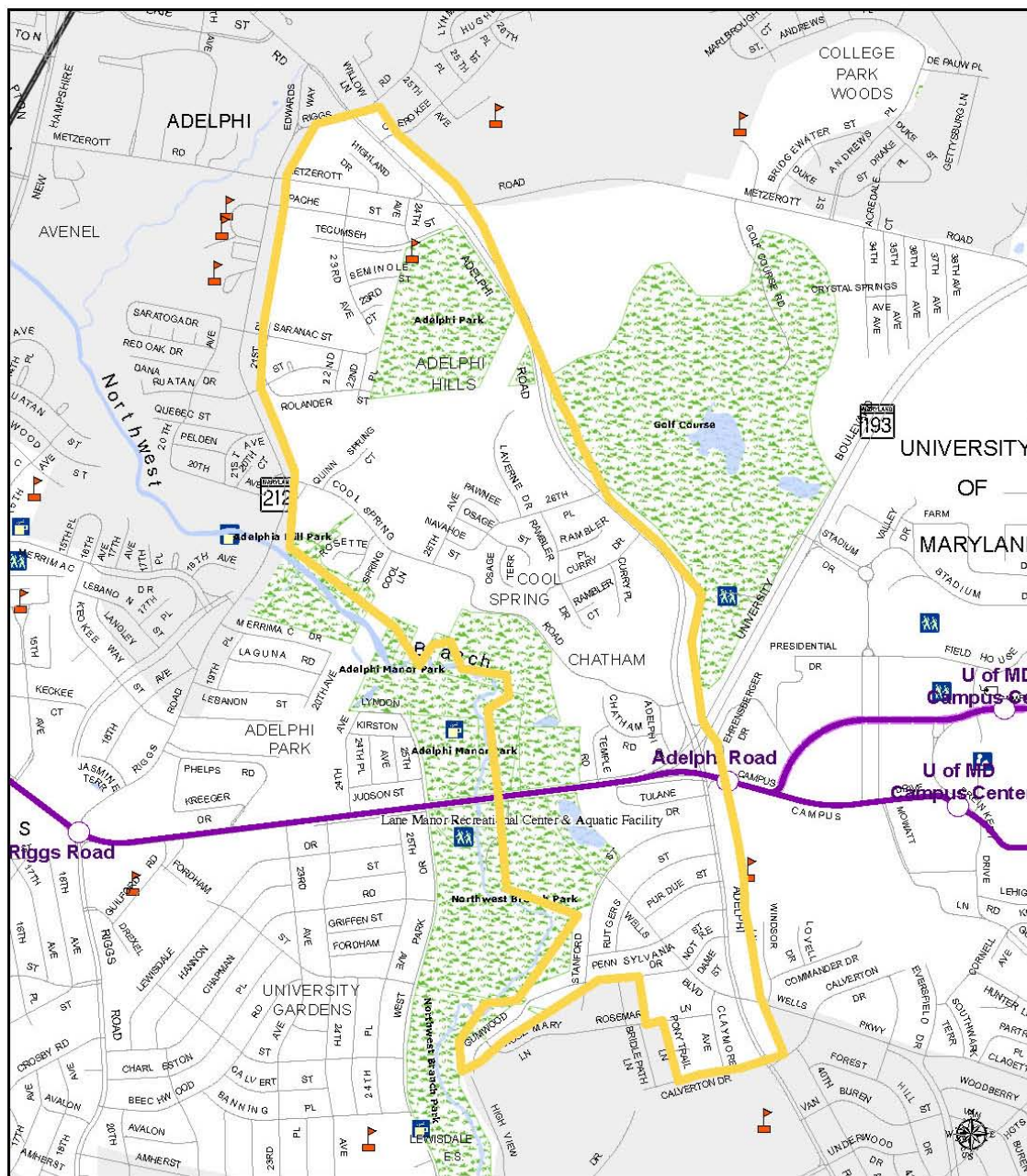
Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The U.S. Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

#### A.11.2. *Housing*

The Adelphi neighborhood is a predominantly residential and consists of subdivisions with single-family houses, duplexes, and mid-rise apartment complexes. Most apartments are adjacent to the University of Maryland campus. Subdivisions of single-family houses and duplexes are dispersed throughout the neighborhood; many are clustered around Northwest Branch Stream Valley Park and Adelphi Park. In the neighborhood, 53 percent of households are owner-occupied, compared to 40 percent for the study area.

## Adelphi Neighborhood Map



### Purple Line

Figure A-11 Adelphi

### Community Profiles

#### Legend

|                    |                  |             |         |
|--------------------|------------------|-------------|---------|
| Proposed Stations  | Civic            | Library     | Schools |
| Proposed Alignment | Community Center | Police      | Parks   |
| Proposed Tunnel    | Fire Station     | Post Office |         |
| WMATA Metrorail    | Historic         | Recreation  |         |
| MARC Commuter Rail | Hospital         | Worship     |         |

Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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### **A.11.3. Community Facilities and Services**

Several community facilities and services were identified within the Adelphi neighborhood. These facilities are listed in Table A-22 and can be found on Figure A-11.

**Adelphi Community Facilities**

| Facility Name                                | Type of Facility   |
|----------------------------------------------|--------------------|
| Adelphi Friends Meeting                      | Religious          |
| Adelphi Manor Park                           | Recreational       |
| Chillum Adelphi Fire Co. #34                 | Emergency Services |
| Christadelphians Church                      | Religious          |
| Christian Science Church                     | Religious          |
| Four Square Gospel Church                    | Religious          |
| Mary Harris "Mother" Jones Elementary School | Educational        |
| Northwest Branch Stream Valley Park          | Recreational       |
| St. Mark's Church                            | Religious          |
| University Hills Park                        | Recreational       |

Sources: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Prince George's County Office of Information and Communications, Geographic Information Systems, 2007

### **A.11.4. Access and Mobility**

The Adelphi neighborhood is served by Metrobus, TheBus, and the University of Maryland Shuttle system. Major bus lines in the neighborhood operate along major arterials, including University Boulevard, Riggs Road, and Adelphi Road. The Northwest Branch Trail is a pedestrian and bicycle route extending in Montgomery County to the northwest and to the University of Maryland to the east.

Fifteen percent of the neighborhood's population uses some type of public transportation to commute to work; this is less than the study area (21 percent) or Prince George's County (12 percent). The percentage of the neighborhood's households with no vehicle available (9 percent) is less than the study area (17 percent), but more than Prince George's County (11 percent).

### **A.11.5. Population and Employment Projections**

Both the population and employment growth rates between 2000 and 2030 are expected to be substantial, but the actual numbers, particularly for employment, are low.

| Population |       |                                      | Employment |      |                                      |
|------------|-------|--------------------------------------|------------|------|--------------------------------------|
| 2000       | 2030  | Projected Total Change<br>(% Change) | 2000       | 2030 | Projected Total Change<br>(% Change) |
| 1,329      | 1,707 | +378 (+28%)                          | 28         | 39   | +11 (+39%)                           |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

Retail is the employment sector in this area and will continue to be so in 2030.



| Employment Sector |      |                   |      |                       |      |                  |      |
|-------------------|------|-------------------|------|-----------------------|------|------------------|------|
| Office Employment |      | Retail Employment |      | Industrial Employment |      | Other Employment |      |
| 2000              | 2030 | 2000              | 2030 | 2000                  | 2030 | 2000             | 2030 |
| 1                 | 3    | 26                | 33   | 0                     | 0    | 1                | 3    |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

## A.12. College Park Characteristics

The College Park neighborhood is in Prince George's County, northeast of Washington, D.C. It is bisected by US 1, situated east of Adelphi Road, west of Berwyn Heights and Bowdoin Avenue, north of Albion Road, and generally south of Greenbelt Road and Metzert Road. Nearly the entire College Park neighborhood, including the University of Maryland, is incorporated as the City of College Park. A small area of the neighborhood, College Heights Estates, is not incorporated (see Figure A-12).

The University of Maryland campus is the dominant feature of College Park, with a student population of 36,000. The University employs 12,000 people and supports research, sports, and cultural facilities in College Park and the surrounding communities. The US 1 corridor is the main commercial area in College Park and contains primarily University-oriented restaurants, shops, and services. Residential areas include dormitories and graduate student housing on campus, as well as single-family developments and fraternities primarily east of US 1. College Park neighborhoods, such as Old Town and Calvert Hills, developed along a streetcar line that ran along the current route of Rhode Island Avenue. Portions of both Paint Branch Stream Valley Park and Indian Creek Stream Valley Park, which provide a variety of recreational opportunities, are within the College Park neighborhood.

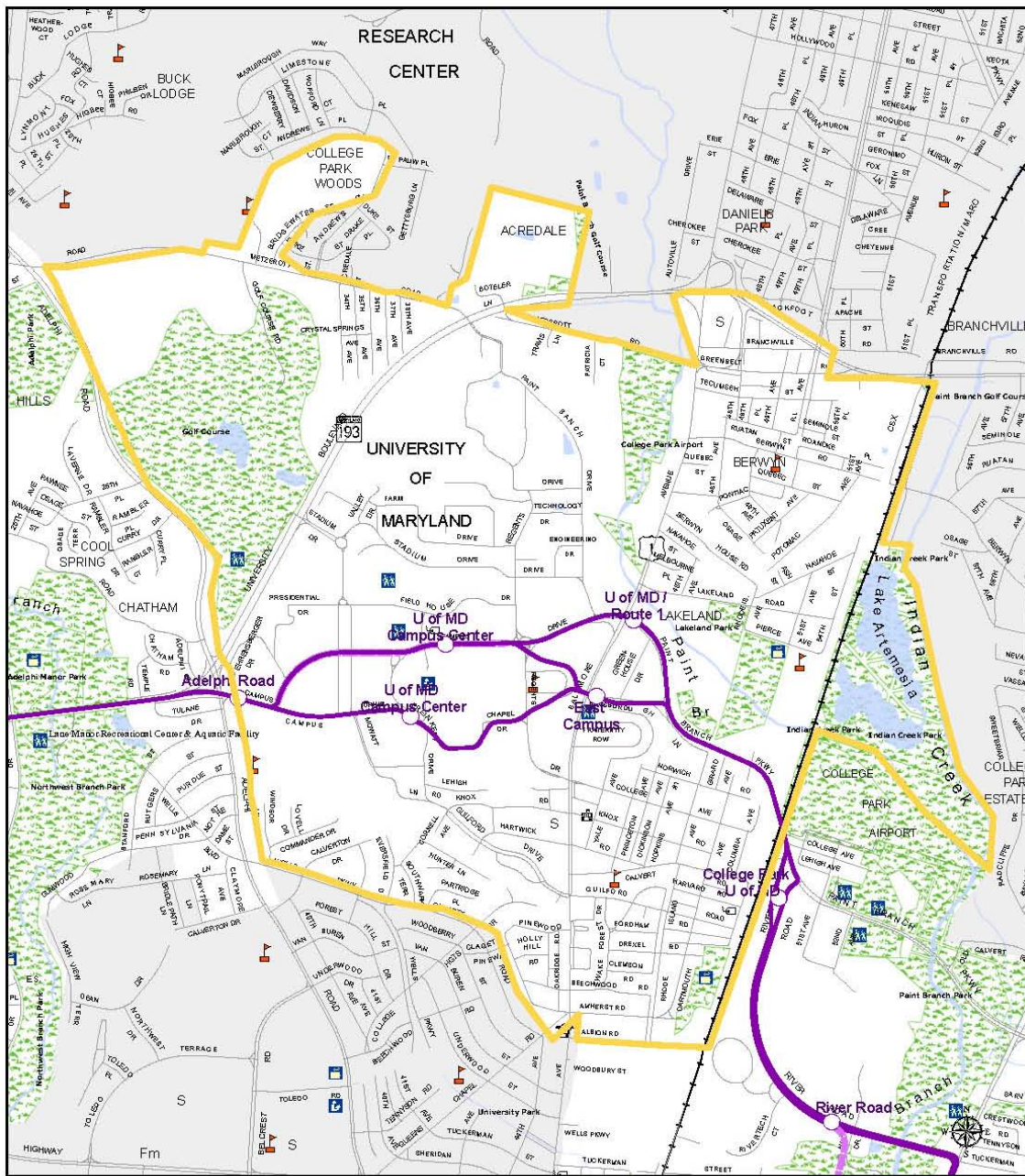
### A.12.1. Population

As shown in Table A-23, the College Park neighborhood has a larger white population (71 percent) than the study area (46 percent) or Prince George's County (27 percent). The portion of the Hispanic population in the neighborhood (4 percent) is much less than the proportion in the study area (24 percent) or in the County (7 percent). Approximately 4 percent of households are linguistically isolated. The median annual household income is \$53,750, which is slightly higher than the median of \$48,812 for the study area. However, 32 percent of the population lives below the federal poverty level compared to 12 percent for the study area.





## College Park Neighborhood Map



| Purple Line                                                                         |                    | Community Profiles                                                                    |                  |
|-------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------|------------------|
| Figure A-12 College Park                                                            |                    |                                                                                       |                  |
| Legend                                                                              |                    |                                                                                       |                  |
|  | Proposed Stations  |    | Civic            |
|  | Proposed Alignment |    | Community Center |
|  | Proposed Tunnel    |    | Fire Station     |
|  | WMATA Metrorail    |    | Historic         |
|  | MARC Commuter Rail |    | Hospital         |
|                                                                                     |                    |  | Library          |
|                                                                                     |                    |  | Police           |
|                                                                                     |                    |  | Post Office      |
|                                                                                     |                    |  | Recreation       |
|                                                                                     |                    |  | Worship          |
|                                                                                     |                    |  | Schools          |
|                                                                                     |                    |  | Parks            |

Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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### College Park Demographics

| Category                                              | Neighborhood | Prince George's<br>County Portion<br>of the Study<br>Area | Study<br>Area | Prince<br>George's<br>County |
|-------------------------------------------------------|--------------|-----------------------------------------------------------|---------------|------------------------------|
| Population                                            | 15,434       | 69,219                                                    | 140,981       | 801,515                      |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                                           |               |                              |
| White only                                            | 71%          | 40%                                                       | 46%           | 27%                          |
| African-American or Black only                        | 15%          | 37%                                                       | 31%           | 63%                          |
| American Indian/Native Alaskan<br>only                | <1%          | 1%                                                        | 1%            | <1%                          |
| Asian                                                 | 9%           | 5%                                                        | 6%            | 4%                           |
| Native Hawaiian/Pacific Islander<br>only              | <1%          | 0%                                                        | <1%           | <1%                          |
| Other Race                                            | 2%           | 12%                                                       | 11%           | 4%                           |
| Two or More Races                                     | 3%           | 5%                                                        | 5%            | 3%                           |
| Hispanic Population                                   | 4%           | 28%                                                       | 24%           | 7%                           |
| Median Household Income                               | \$53,750     | \$44,937                                                  | \$48,812      | \$55,256                     |
| People Living Below Poverty                           | 32%          | 14.6%                                                     | 11.7%         | 7.7%                         |
| Linguistically Isolated Households                    | 4%           | 16%                                                       | 12.5%         | 3.5%                         |
| Using Public Transportation to<br>Work                | 9%           | 16%                                                       | 21%           | 12%                          |
| Households with No Vehicle<br>Available               | 17%          | 16%                                                       | 17%           | 10.5%                        |
| Housing Units                                         | 2,772        | 20,716                                                    | 52,328        | 302,378                      |
| Owner-Occupied Households                             | 38%          | 45%                                                       | 40%           | 62%                          |
| Renter-Occupied Households                            | 62%          | 55%                                                       | 60%           | 38%                          |
| Vacant Residences                                     | 3.2%         | 4.5%                                                      | 3.8%          | 5.2%                         |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The U.S. Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

#### **A.12.2. Housing**

The campus includes mid-to-high rise dormitories and apartment buildings. Residential areas east of US 1 are a mix of single-family houses, group houses, townhouses, and apartment complexes. High-rise student housing has recently been constructed on US 1, and there are plans to construct additional student housing complexes. Census 2000 data reveals that 38 percent of households in the neighborhood were owner-occupied compared to 40 percent for the study area and 62 percent for Prince George's County. The percentage of renter-occupied households in College Park (62 percent) is similar to that of the study area (60 percent), but lower than Prince George's County (38 percent).



### A.12.3. *Community Facilities and Services*

Numerous community facilities and services were identified within the College Park neighborhood. These facilities are listed in Table A-24 and can be found on Figure A-12.

**College Park Community Facilities**

| <b>Facility Name</b>                        | <b>Type of Facility</b> |
|---------------------------------------------|-------------------------|
| University of Maryland Golf Course          | Recreational            |
| University College - University of Maryland | Educational             |
| University Methodist Church                 | Religious               |
| College Park Latter Day Saints              | Religious               |
| University Baptist Church                   | Religious               |
| Jewish Student Center                       | Religious               |
| Catholic Student Center                     | Religious               |
| Memorial Chapel                             | Religious               |
| St. Mark's Elementary School                | Educational             |
| Branchville Fire Co. #11                    | Emergency Services      |
| Byrd Stadium                                | Recreational            |
| Calvert Neighborhood Park                   | Recreational            |
| Cole Field House                            | Recreational            |
| College Park Church of God                  | Religious               |
| College Park Municipal Center               | Municipal Center        |
| College Park Community Center               | Recreational            |
| Emory AME Church                            | Religious               |
| Friends Community School                    | Religious               |
| Hope Lutheran Church                        | Religious               |
| Holy Redeemer Catholic Church               | Religious               |
| Holy Redeemer School                        | Educational             |
| Indian Creek Stream Valley Park             | Recreational            |
| Lakeland Community Park                     | Recreational            |
| Paint Branch Stream Valley Park             | Recreational            |
| Paint Branch Elementary School              | Educational             |
| Paint Branch Parkway Community Park         | Recreational            |
| Post Office at Stamp Student Union          | Post Office             |
| Ritchie Coliseum                            | Recreational            |
| St. Mark's Church                           | Religious               |
| St. Andrew's Episcopal Church               | Religious               |
| Stamp Student Union                         | Recreational            |
| University of Maryland College Park         | Educational             |
| University Park Police Station              | Emergency Services      |
| Wallace Presbyterian Church                 | Religious               |

Sources: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Prince George's County Office of Information and Communications, Geographic Information Systems, 2007

#### **A.12.4. Access and Mobility**

The neighborhood is served by Metrorail, MARC trains, and numerous bus lines provided by Metrobus, TheBus, and the University of Maryland's Shuttle service. Major bus lines in the neighborhood operate along US 1, Paint Branch Avenue, Campus Drive, Adelphi Road, and Edmonston Road. The College Park – UM Metro Station is located just to the east of the neighborhood.

A lower percentage of the neighborhood's population (9 percent) uses some type of public transportation to commute to work compared to the entire study area (21 percent) and Prince George's County (12 percent) and the Prince George's County portion of the study area (16 percent). The percentage of the neighborhood's households with no vehicle available (17 percent) is consistent with that of the study area.

#### **A.12.5. Population and Employment Projections**

Population and employment growth rates are expected to be substantial in College Park.

| Population |        |                                      | Employment |        |                                      |
|------------|--------|--------------------------------------|------------|--------|--------------------------------------|
| 2000       | 2030   | Projected Total Change<br>(% Change) | 2000       | 2030   | Projected Total Change<br>(% Change) |
| 17,909     | 26,562 | +8,653 (+48%)                        | 20,128     | 27,054 | +6,926 (+34%)                        |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

The vast majority of jobs in College Park are at the University of Maryland and are expected to continue to be so in 2030.

| Employment Sector |       |                   |       |                       |       |                  |        |
|-------------------|-------|-------------------|-------|-----------------------|-------|------------------|--------|
| Office Employment |       | Retail Employment |       | Industrial Employment |       | Other Employment |        |
| 2000              | 2030  | 2000              | 2030  | 2000                  | 2030  | 2000             | 2030   |
| 1,352             | 2,102 | 1,090             | 1,511 | 1,035                 | 1,461 | 16,651           | 21,980 |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

### **A.13. Riverdale Characteristics**

The Riverdale neighborhood is located in Prince George's County. It is bisected by Kenilworth Avenue and East West Highway. This neighborhood is to the south of Albion Road, Paint Branch Road, and Good Luck Road; north of Carters Lane and the Edmonston municipal boundary; west of Baltimore-Washington Parkway; and east of Taylor Road, 48<sup>th</sup> Avenue, and the CSX right-of-way. Portions of the study area west of Kenilworth Avenue are incorporated as part of Riverdale Park. Areas east of Kenilworth Avenue, generally referred to as Riverdale Heights, are unincorporated (see Figure A-13).

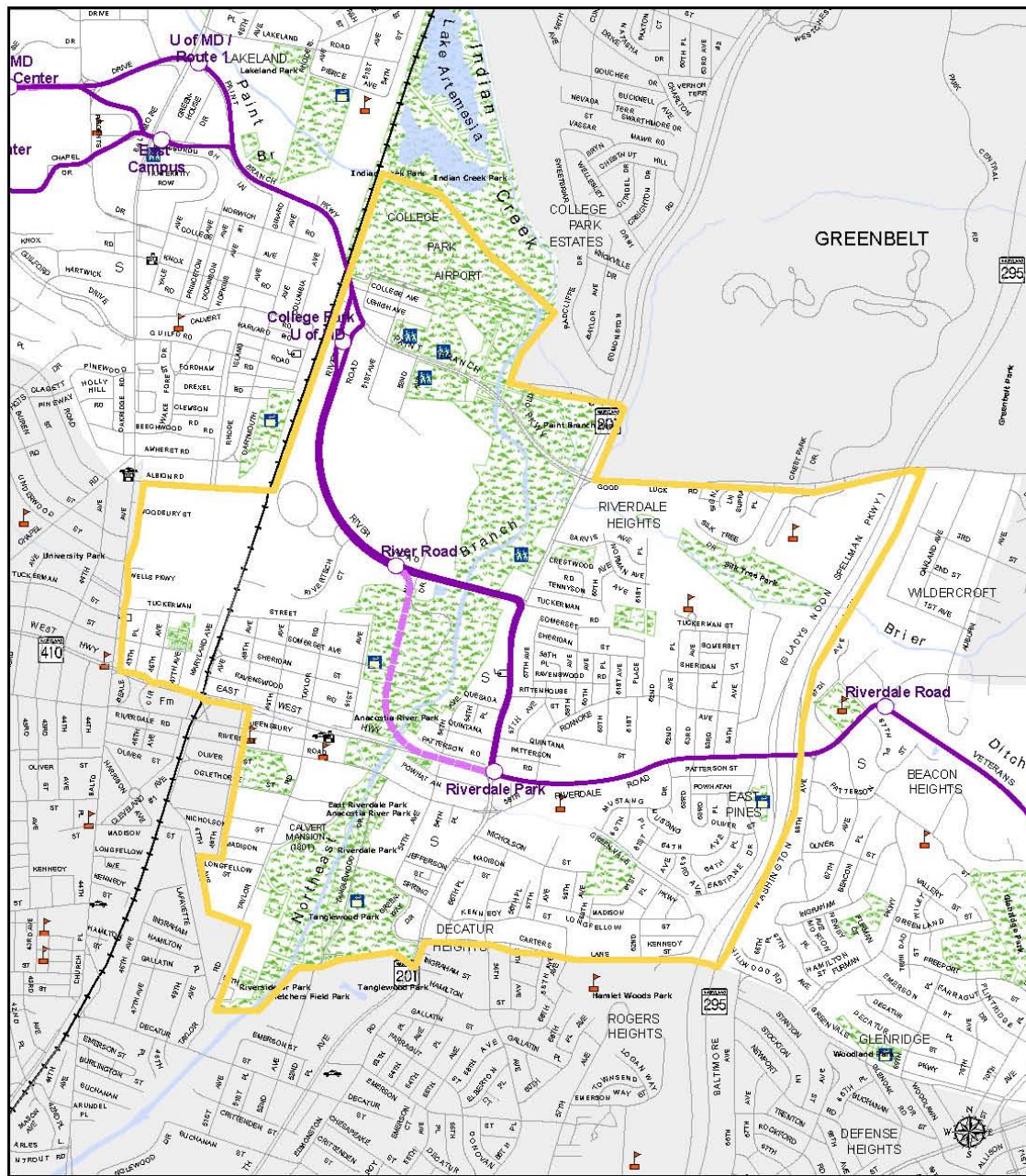
Residential development characterizes most of the neighborhood. Offices occupied by federal agencies, University of Maryland facilities, and private government contractors make up the



northwestern quadrant of Riverdale, north of Tuckerman Street. East West Highway is mostly residential; Kenilworth Avenue contains residences as well as a strip commercial center; and US 1 is residential to the north of East West Highway and commercial to the south of East West Highway.



## Riverdale Neighborhood Map



### Purple Line

### Community Profiles

Figure A-13 Riverdale

#### Legend

|                    |                  |             |         |
|--------------------|------------------|-------------|---------|
| Proposed Stations  | Civic            | Library     | Schools |
| Proposed Alignment | Community Center | Police      | Parks   |
| Proposed Tunnel    | Fire Station     | Post Office |         |
| WMATA Metrorail    | Historic         | Recreation  |         |
| MARC Commuter Rail | Hospital         | Worship     |         |

Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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### A.13.1. Population

As shown in Table A-25, Riverdale has a larger Black population (45 percent) than the study area (31 percent) and Prince George's County (37 percent). Linguistically isolated households represent 14 percent of households, compared to the study area's 13 percent, Montgomery County's 6 percent, and Prince George's County's 4 percent. The median annual household income is \$52,833, which is slightly higher than the median household income of \$48,812 for the study area.

**Riverdale Demographics**

| Category                                              | Neighborhood | Prince George's<br>County Portion<br>of the Study<br>Area | Study<br>Area | Prince<br>George's<br>County |
|-------------------------------------------------------|--------------|-----------------------------------------------------------|---------------|------------------------------|
| Population                                            | 13,763       | 69,219                                                    | 140,981       | 801,515                      |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                                           |               |                              |
| White only                                            | 21%          | 40%                                                       | 46%           | 27%                          |
| African-American or Black only                        | 45%          | 37%                                                       | 31%           | 63%                          |
| American Indian/Native Alaskan only                   | <1%          | 1%                                                        | 1%            | <1%                          |
| Asian                                                 | 4%           | 5%                                                        | 6%            | 4%                           |
| Native Hawaiian/Pacific Islander only                 | <1%          | 0%                                                        | <1%           | <1%                          |
| Other Race                                            | 1%           | 12%                                                       | 11%           | 4%                           |
| Two or More Races                                     | 2%           | 5%                                                        | 5%            | 3%                           |
| Hispanic Population                                   | 28%          | 28%                                                       | 24%           | 7%                           |
| Median Household Income                               | \$52,833     | \$44,937                                                  | \$48,812      | \$55,256                     |
| People Living Below Poverty                           | 13%          | 14.6%                                                     | 11.7%         | 7.7%                         |
| Linguistically Isolated Households                    | 14%          | 16%                                                       | 12.5%         | 3.5%                         |
| Using Public Transportation to Work                   | 16%          | 16%                                                       | 21%           | 12%                          |
| Households with No Vehicle Available                  | 9%           | 16%                                                       | 17%           | 10.5%                        |
| Housing Units                                         | 4,502        | 20,716                                                    | 52,328        | 302,378                      |
| Owner-Occupied Households                             | 47%          | 45%                                                       | 40%           | 62%                          |
| Renter-Occupied Households                            | 53%          | 55%                                                       | 60%           | 38%                          |
| Vacant Residences                                     | 5.9%         | 4.5%                                                      | 3.8%          | 5.2%                         |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The U.S. Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

### A.13.2. Housing

The Riverdale neighborhood features mostly single-family houses and mid-to-high rise apartment buildings. Houses are a variety of ages and sizes, as the neighborhood has continually expanded and been subject to infill development since the 1890s when the first subdivisions were constructed by the Riverdale Park Company. Some small apartment buildings are interspersed in areas of primarily single-family houses; larger apartment buildings are clustered in east Riverdale near the Anacostia River Park and Kenilworth Avenue. Housing units within

Riverdale are 47 percent owner-occupied compared to 40 percent for the study area, 45 percent for the Prince George's County portion of the study area, and 62 percent for Prince George's County.

### **A.13.3. Community Facilities and Services**

Several community facilities and services were identified within the Riverdale neighborhood. These facilities are listed in Table A-26 and can be found in Figure A-13.

**Riverdale Community Facilities**

| <b>Facility Name</b>                               | <b>Type of Facility</b> |
|----------------------------------------------------|-------------------------|
| Anacostia River Park                               | Recreational            |
| Browning Grove Park                                | Recreational            |
| Celestial Church of Christ                         | Religious               |
| College Park Aviation Museum                       | Recreational            |
| College Park Airport                               | Transportation          |
| East Pines Community Center                        | Recreational            |
| Edmonston Community Center                         | Recreational            |
| Ellen E. Linson Pool and Herbert W. Wells Ice Rink | Recreational            |
| Fletcher's Field Park                              | Recreational            |
| Kenilworth Post Office                             | Post Office             |
| Northeast Branch Trail                             | Recreational            |
| Paint Branch Parkway Community Park                | Recreational            |
| Parkdale High School                               | Educational             |
| Refreshing Spring Church of God in Christ          | Religious               |
| Riverdale Community Center                         | Recreational            |
| Riverdale Elementary School                        | Educational             |
| Riverdale Fire Co. #7                              | Emergency Services      |
| Riverdale Heights Fire Co. #13                     | Emergency Services      |
| Riverdale Mansion                                  | Point of Interest       |
| Riverdale Police Department                        | Emergency Services      |
| Riverdale Post Office                              | Post Office             |
| Riverdale Town Hall                                | Civic                   |
| Riverside Drive Park                               | Recreational            |
| St. Bernard of Clairvaux Church                    | Religious               |
| St. Bernard School                                 | Educational             |
| St. John Evangelical Lutheran                      | Religious               |
| Solid Rock Church                                  | Religious               |
| Tennis Center at College Park                      | Recreational            |
| University of Maryland Annex                       | Educational             |
| William Wirt Middle School                         | Educational             |

Sources: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Prince George's County Office of Information and Communications, Geographic Information Systems, 2007



#### **A.13.4. Access and Mobility**

The Riverdale neighborhood is served by the MARC Camden Line at the Riverdale MARC station, Metrobus, and TheBus. Major bus lines in the neighborhood operate along major arterial roadways, such as East West Highway, Riverdale Road, Queensbury Road, Kenilworth Avenue, and Good Luck Road. The Northeast Branch Trail is a pedestrian and bicycle route connecting the Riverdale neighborhood with Bladensburg to the south and College Park to the north.

The percentage of the neighborhood's population (16 percent) that uses some type of public transportation to commute to work is less than that of the study area (21 percent), but more than Prince George's County (12 percent). The percentage of neighborhood households with no vehicle available (9 percent) is less than the study area percentage (17 percent).

#### **A.13.5. Population and Employment Projections**

Riverdale is expected to experience some population growth and very substantial employment growth between 2000 and 2030.

| Population |        |                                      | Employment |        |                                      |
|------------|--------|--------------------------------------|------------|--------|--------------------------------------|
| 2000       | 2030   | Projected Total Change<br>(% Change) | 2000       | 2030   | Projected Total Change<br>(% Change) |
| 21,097     | 23,157 | +2,060 (+10%)                        | 10,488     | 21,444 | +10,956 (+104%)                      |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

Employment in Riverdale Park is distributed across a range of employment sectors and is expected to continue to be so in 2030.

| Employment Sector |       |                   |       |                       |       |                  |       |
|-------------------|-------|-------------------|-------|-----------------------|-------|------------------|-------|
| Office Employment |       | Retail Employment |       | Industrial Employment |       | Other Employment |       |
| 2000              | 2030  | 2000              | 2030  | 2000                  | 2030  | 2000             | 2030  |
| 3,167             | 7,121 | 2,422             | 4,062 | 929                   | 1,478 | 3,970            | 8,783 |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

#### **A.14. Glenridge/Beacon Heights Characteristics**

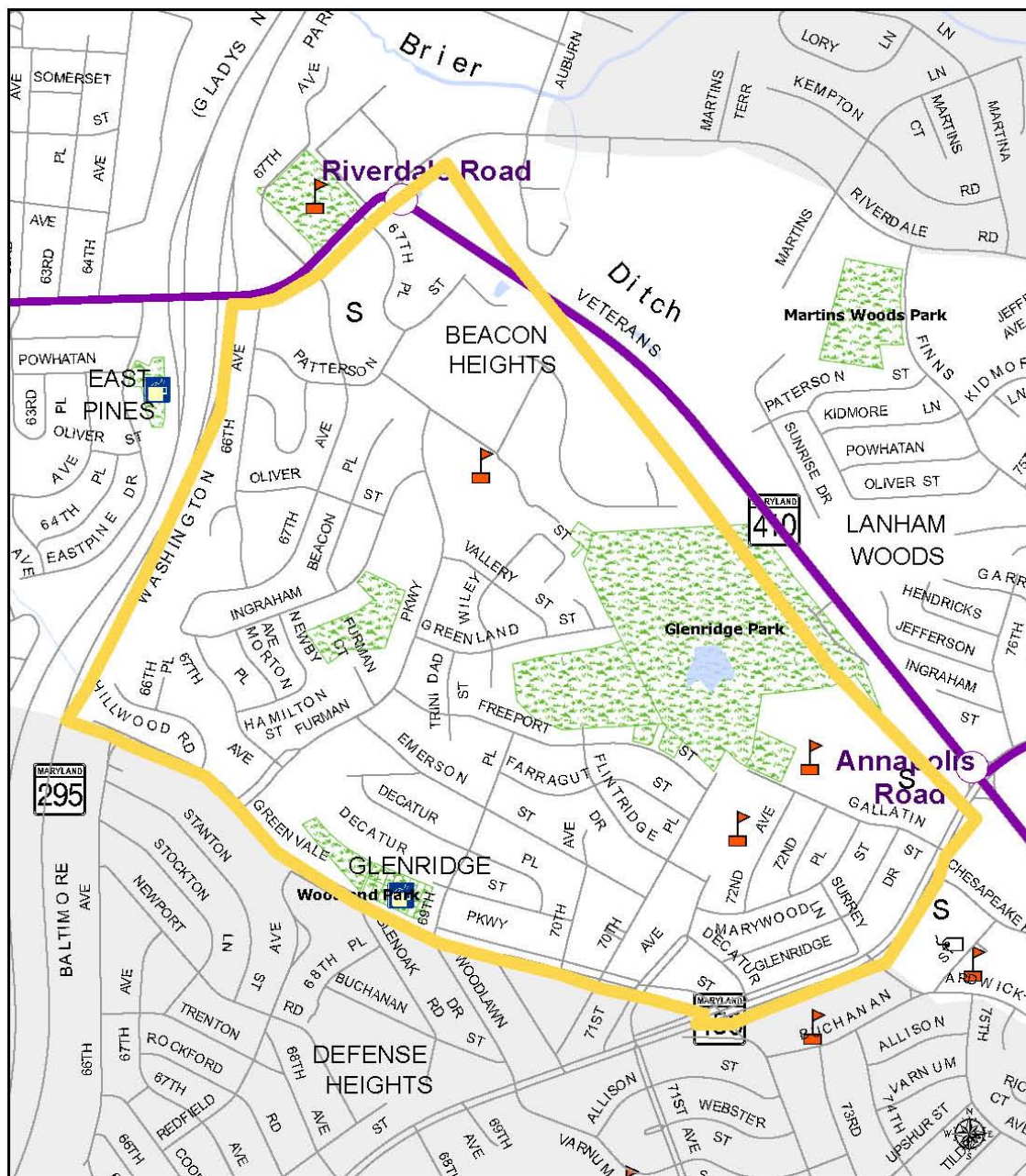
The Glenridge/Beacon Heights neighborhood is in Prince George's County. It is east of Baltimore-Washington Parkway, south of Veterans Parkway, west of Annapolis Road, and north of Greenvale Parkway. The Glenridge/Beacon Heights neighborhood is entirely unincorporated, but is located within the Woodlawn CDP (see Figure A-14).

Glenridge/Beacon Heights is a residential area, consisting of detached single-family houses and some duplexes. There is one apartment complex, Park View Gardens, in the neighborhood.

##### ***A.14.1. Population***

The Black population and the Hispanic population make up 70 percent and 9 percent of the total population, respectively, which is inconsistent with study area proportions but in line with Prince George's County population proportions (Table A-27). The median annual household income is \$50,571, and 8 percent of the population lives below poverty. Three percent of households are linguistically isolated, compared with 12.5 percent for the study area and 3.5 percent for Prince George's County.

## Glenridge/Beacon Heights Neighborhood Map



| Purple Line                            | Community Profiles |
|----------------------------------------|--------------------|
| Figure A-14 Glenridge / Beacon Heights |                    |

**Legend**

|                                                                                                        |                                                                                                      |                                                                                                 |                                                                                               |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|  Proposed Stations  |  Civic            |  Library     |  Schools |
|  Proposed Alignment |  Community Center |  Police      |  Parks   |
|  Proposed Tunnel    |  Fire Station     |  Post Office |                                                                                               |
|  WMATA Metrorail    |  Historic         |  Recreation  |                                                                                               |
|  MARC Commuter Rail |  Hospital         |  Worship     |                                                                                               |

Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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### Glenridge/Beacon Heights Demographics

| Category                                              | Neighborhood | Prince George's<br>County Portion<br>of the Study<br>Area | Study Area | Prince<br>George's<br>County |
|-------------------------------------------------------|--------------|-----------------------------------------------------------|------------|------------------------------|
| Population                                            | 5,272        | 69,219                                                    | 140,981    | 801,515                      |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                                           |            |                              |
| White only                                            | 18%          | 40%                                                       | 46%        | 27%                          |
| African-American or Black only                        | 70%          | 37%                                                       | 31%        | 63%                          |
| American Indian/Native Alaskan<br>only                | 2%           | 1%                                                        | 1%         | <1%                          |
| Asian                                                 | 3%           | 5%                                                        | 6%         | 4%                           |
| Native Hawaiian/Pacific Islander<br>only              | 2%           | 0%                                                        | <1%        | <1%                          |
| Other Race                                            | 4%           | 12%                                                       | 11%        | 4%                           |
| Two or More Races                                     | 4%           | 5%                                                        | 5%         | 3%                           |
| Hispanic Population                                   | 9%           | 28%                                                       | 24%        | 7%                           |
| Median Household Income                               | \$50,571     | \$44,937                                                  | \$48,812   | \$55,256                     |
| People Living Below Poverty                           | 8%           | 14.6%                                                     | 11.7%      | 7.7%                         |
| Linguistically Isolated Households                    | 3%           | 16%                                                       | 12.5%      | 3.5%                         |
| Using Public Transportation to<br>Work                | 17%          | 16%                                                       | 21%        | 12%                          |
| Households with No Vehicle<br>Available               | 14%          | 16%                                                       | 17%        | 10.5%                        |
| Housing Units                                         | 1,908        | 20,716                                                    | 52,328     | 302,378                      |
| Owner-Occupied Households                             | 64%          | 45%                                                       | 40%        | 62%                          |
| Renter-Occupied Households                            | 36%          | 55%                                                       | 60%        | 38%                          |
| Vacant Residences                                     | 7.3%         | 4.5%                                                      | 3.8%       | 5.2%                         |

Source: U.S Census Bureau, Census 2000, Summary File 3

Note: The US Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.

#### **A.14.2. Housing**

Most housing units in the Glenridge/Beacon Heights neighborhood were constructed between the 1950s and the 1970s, but one subdivision, Riverdale Overlook, is currently under construction. In this neighborhood, 64 percent of households were owner-occupied, compared to 40 percent for the study area, and 62 percent for Prince George's County.

#### **A.14.3. Community Facilities and Services**

Several community facilities and services were identified within the Glenridge/Beacon Heights neighborhood. These facilities are listed in Table A-28 and can be found on Figure A-14.



### Glenridge/Beacon Heights Community Facilities

| Facility Name                             | Type of Facility |
|-------------------------------------------|------------------|
| Beacon Heights Elementary School          | Educational      |
| Glenridge Elementary School               | Educational      |
| Glenridge Community Park                  | Recreational     |
| MNCPPC Northern Area Maintenance Facility | Maintenance      |
| Woodlawn Christian Fellowship             | Religious        |
| Woodlawn Community Center                 | Recreational     |
| Woodridge Elementary School               | Educational      |

Sources: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Prince George's County Office of Information and Communications, Geographic Information Systems, 2007

#### **A.14.4. Access and Mobility**

The Glenridge/Beacon Heights neighborhood is served by Metrobus and TheBus. A major bus line operates along Veterans Parkway.

The percentage of the neighborhood's population that uses some type of public transportation to commute to work (17 percent) is less than the entire study area (21 percent), and higher than Prince George's County (12 percent). The percentage of the neighborhood's households with no vehicle available (14 percent) is less than that of the study area (17 percent), and higher than that of Prince George's County (11 percent).

#### **A.14.5. Population and Employment Projections**

The Glenridge/Beacon Heights neighborhood is expected to experience some minor population loss, but a 24 percent increase in employment by 2030.

| Population |       |                                      | Employment |      |                                      |
|------------|-------|--------------------------------------|------------|------|--------------------------------------|
| 2000       | 2030  | Projected Total Change<br>(% Change) | 2000       | 2030 | Projected Total Change<br>(% Change) |
| 5,167      | 4,997 | -170 (-3%)                           | 709        | 882  | +173 (+24%)                          |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

The majority of jobs in the Glenridge/Beacon Heights neighborhood are retail and are expected to continue to be so.

| Employment Sector |      |                   |      |                       |      |                  |      |
|-------------------|------|-------------------|------|-----------------------|------|------------------|------|
| Office Employment |      | Retail Employment |      | Industrial Employment |      | Other Employment |      |
| 2000              | 2030 | 2000              | 2030 | 2000                  | 2030 | 2000             | 2030 |
| 93                | 116  | 499               | 620  | 32                    | 40   | 85               | 106  |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

## A.15. New Carrollton Characteristics

The New Carrollton neighborhood is in Prince George's County. It is generally north of Veterans Parkway, between the Baltimore-Washington Parkway and Annapolis Road. A portion of this neighborhood is incorporated as part of New Carrollton, but the majority of the neighborhood is unincorporated (see Figure A-15). The neighborhood is primarily residential. Two shopping centers are located along Riverdale Road near Annapolis Road.

### A.15.1. Population

As shown in Table A-29, the New Carrollton neighborhood has a predominantly Black population (67 percent). The Hispanic population comprises 9 percent of the neighborhood, which is proportionately less than the study area (24 percent) but more than Prince George's County (7 percent). The median annual household income is \$52,279, and approximately 10 percent of the population lives below poverty.

**New Carrollton Demographics**

| Category                                              | Neighborhood | Prince George's<br>County Portion<br>of the Study<br>Area | Study<br>Area | Prince<br>George's<br>County |
|-------------------------------------------------------|--------------|-----------------------------------------------------------|---------------|------------------------------|
| Population                                            | 4,364        | 69,219                                                    | 140,981       | 801,515                      |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                                           |               |                              |
| White only                                            | 19%          | 40%                                                       | 46%           | 27%                          |
| African-American or Black only                        | 67%          | 37%                                                       | 31%           | 63%                          |
| American Indian/Native Alaskan only                   | <1%          | 1%                                                        | 1%            | <1%                          |
| Asian                                                 | 6%           | 5%                                                        | 6%            | 4%                           |
| Native Hawaiian/Pacific Islander only                 | <1%          | 0%                                                        | <1%           | <1%                          |
| Other Race                                            | 1%           | 12%                                                       | 11%           | 4%                           |
| Two or More Races                                     | 7%           | 5%                                                        | 5%            | 3%                           |
| Hispanic Population                                   | 9%           | 28%                                                       | 24%           | 7%                           |
| Median Household Income                               | \$52,279     | \$44,937                                                  | \$48,812      | \$55,256                     |
| People Living Below Poverty                           | 10%          | 14.6%                                                     | 11.7%         | 7.7%                         |
| Linguistically Isolated Households                    | 6%           | 16%                                                       | 12.5%         | 3.5%                         |
| Using Public Transportation to Work                   | 15%          | 16%                                                       | 21%           | 12%                          |
| Households with No Vehicle Available                  | 18%          | 16%                                                       | 17%           | 10.5%                        |
| Housing Units                                         | 1,848        | 20,716                                                    | 52,328        | 302,378                      |
| Owner-Occupied Households                             | 44%          | 45%                                                       | 40%           | 62%                          |
| Renter-Occupied Households                            | 56%          | 55%                                                       | 60%           | 38%                          |
| Vacant Residences                                     | 5.5%         | 4.5%                                                      | 3.8%          | 5.2%                         |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The U.S. Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.



#### **A.15.2.     *Housing***

This a suburban residential neighborhood dominated by single-family houses. Several apartment complexes are within the neighborhood. In this neighborhood, 44 percent of households are owner-occupied while 56 percent are renter-occupied.

#### **A.15.3.     *Community Facilities and Services***

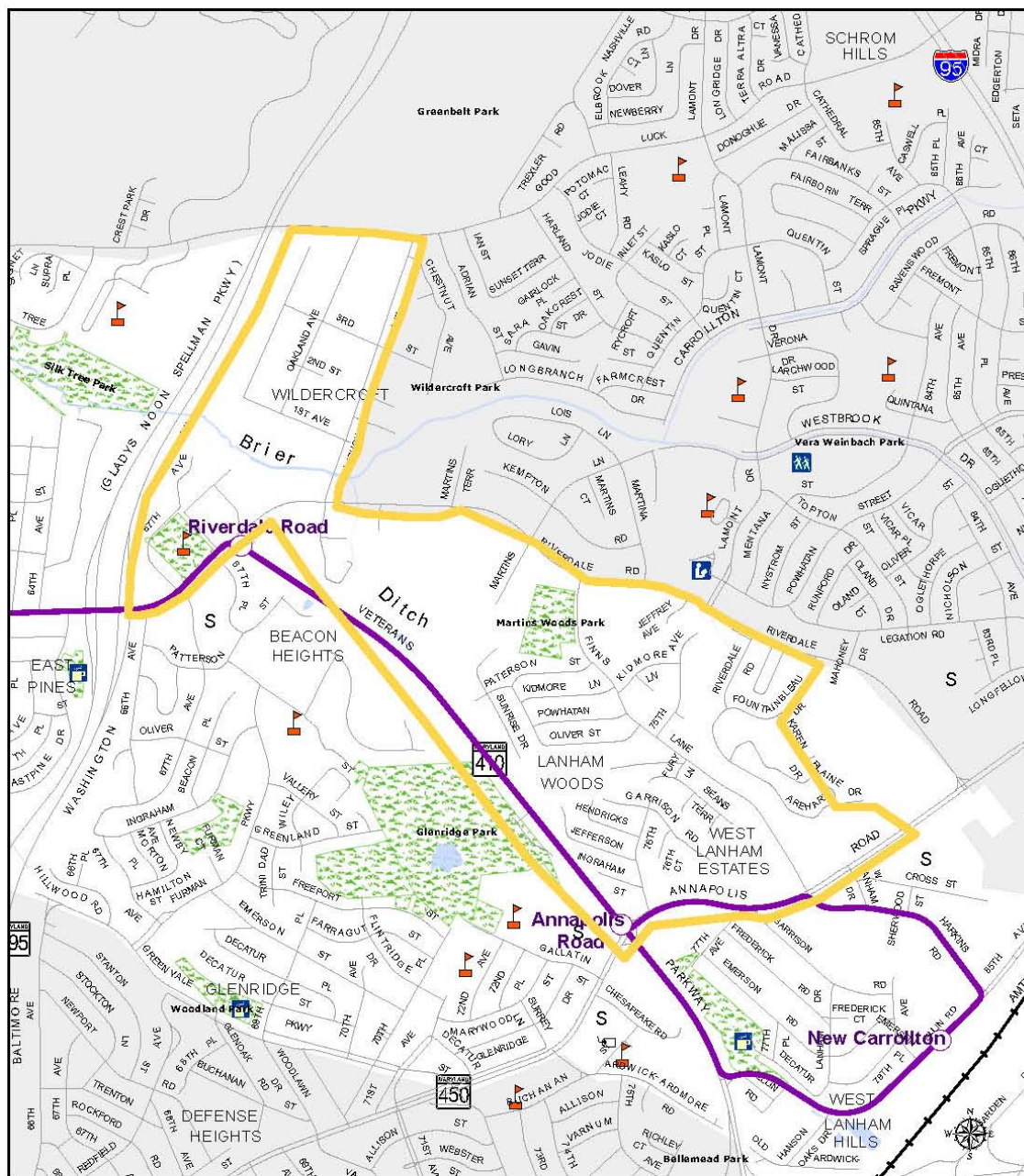
Several community facilities and services were identified within the New Carrollton neighborhood. These facilities are listed in Table A-30 and can be found on Figure A-15.

**New Carrollton Community Facilities**

| <b>Facility Name</b>            | <b>Type of Facility</b> |
|---------------------------------|-------------------------|
| Brookins Faith AME Church       | Religious               |
| Wildercroft Church of Christ    | Religious               |
| First Vietnamese Baptist Church | Religious               |
| Lanham United Methodist Church  | Religious               |
| New Carrollton Library          | Library                 |
| United Baptist Church           | Religious               |
| West Lanham Hills Fire Co. #28  | Emergency Services      |

Sources: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Prince George's County Office of Information and Communications, Geographic Information Systems, 2007

## New Carrollton Neighborhood Map



Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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#### **A.15.4. Access and Mobility**

The New Carrollton neighborhood is served by Metrobus and TheBus. Major bus lines in the neighborhood operate on major roadways, including Annapolis Road, Auburn Avenue, and Riverdale Road.

The percentage of the neighborhood's population (15 percent) that uses some type of public transportation to commute to work is less than the study area (21 percent), but greater than Prince George's County (12 percent). The percentage of the neighborhood's households with no vehicle available (18 percent) is similar to the study area (17 percent).

#### **A.15.5. Population and Employment Projections**

The Glenridge/Beacon Heights neighborhood is expected to experience some minor population loss, but an increase in employment by 2030.

| Population |       |                                      | Employment |       |                                      |
|------------|-------|--------------------------------------|------------|-------|--------------------------------------|
| 2000       | 2030  | Projected Total Change<br>(% Change) | 2000       | 2030  | Projected Total Change<br>(% Change) |
| 9,388      | 9,101 | -287 (-3%)                           | 988        | 1,107 | +119 (+12%)                          |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

Most of the jobs in the Glenridge/Beacon Heights neighborhood will continue to be classified as Other Employment.

| Employment Sector |      |                   |      |                       |      |                  |      |
|-------------------|------|-------------------|------|-----------------------|------|------------------|------|
| Office Employment |      | Retail Employment |      | Industrial Employment |      | Other Employment |      |
| 2000              | 2030 | 2000              | 2030 | 2000                  | 2030 | 2000             | 2030 |
| 129               | 147  | 81                | 88   | 136                   | 147  | 642              | 725  |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

### **A.16. West Lanham Hills Characteristics**

The West Lanham Hills neighborhood (as defined for this analysis) is bisected by US 50, between the Capital Beltway and Annapolis Road, (see Figure A-16). A small northern portion of this neighborhood is incorporated as part of New Carrollton, and a small southern portion, Dodge Park, is incorporated as part of Glenarden. However, the majority of the West Lanham Hills neighborhood, particularly the areas of industrial and office space near the New Carrollton Metro Station, is unincorporated.

The West Lanham Hills neighborhood surrounds the New Carrollton Metro Station and the industrial and office parks in the immediate vicinity of the station. Two residential clusters are located in the northern and southern portions of the neighborhood. One residential cluster, West

Lanham Hills itself, lies between Annapolis and Ellin Roads. The other cluster, Dodge Park, is north of Martin Luther King, Jr. Highway.

***A.16.1. Population***

The greater West Lanham Hills neighborhood is 73 percent Black and 22 percent White (Table A-32). The Hispanic population is 6 percent, which is much lower than the proportion of Hispanics in the Prince George's County portion of the study area (28 percent). The median annual household income is \$45,908, and approximately 13 percent of the population lives below the poverty threshold.

***A.16.2. Housing***

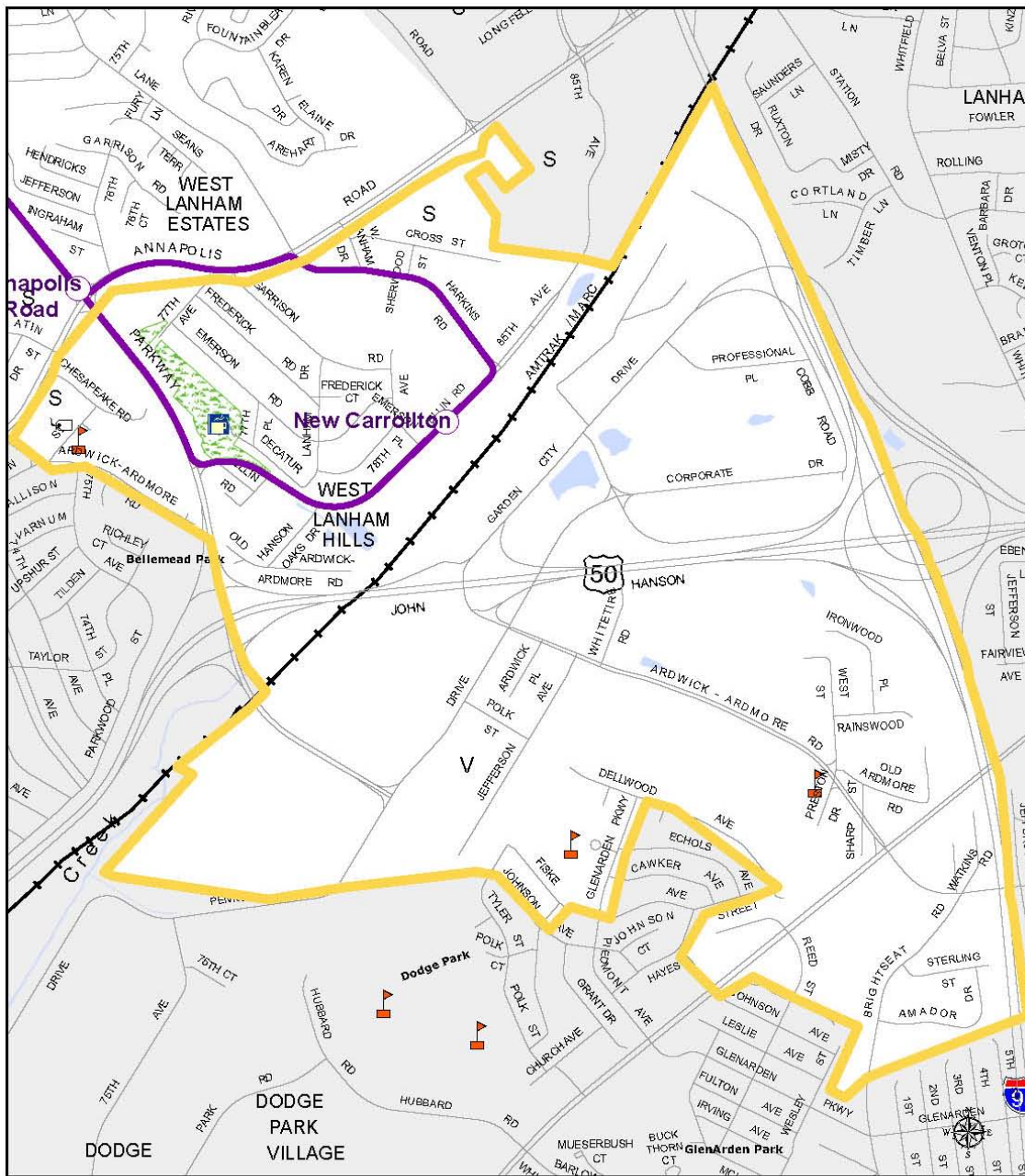
The two residential clusters, West Lanham Hills and Dodge Park, are comprised of single-family houses dating from the 1960s through the 1980s. In this neighborhood, 56 percent of the households are owner-occupied.

***A.16.3. Community Facilities and Services***

Several community facilities and services were identified within the West Lanham Hills neighborhood. These facilities are listed in Table A-33 and can be found on Figure A-16.



## West Lanham Hills Neighborhood Map



Source: SHA, Md Department of Assessments and Taxation, MNCPPC, Prince George's County Planning Dept, Montgomery County Planning Dept.

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### West Lanham Hills Demographics

| Category                                              | Neighborhood | Prince George's<br>County Portion<br>of the Study<br>Area | Study<br>Area | Prince<br>George's<br>County |
|-------------------------------------------------------|--------------|-----------------------------------------------------------|---------------|------------------------------|
| Population                                            | 2,284        | 69,219                                                    | 140,981       | 801,515                      |
| <b><i>Racial Distribution of Total Population</i></b> |              |                                                           |               |                              |
| White only                                            | 22%          | 40%                                                       | 46%           | 27%                          |
| African-American or Black only                        | 73%          | 37%                                                       | 31%           | 63%                          |
| American Indian/Native Alaskan<br>only                | 1%           | 1%                                                        | 1%            | <1%                          |
| Asian                                                 | <1%          | 5%                                                        | 6%            | 4%                           |
| Native Hawaiian/Pacific Islander<br>only              | <1%          | 0%                                                        | <1%           | <1%                          |
| Other Race                                            | 1%           | 12%                                                       | 11%           | 4%                           |
| Two or More Races                                     | 3%           | 5%                                                        | 5%            | 3%                           |
| Hispanic Population                                   | 6%           | 28%                                                       | 24%           | 7%                           |
| Median Household Income                               | \$45,908     | \$44,937                                                  | \$48,812      | \$55,256                     |
| People Living Below Poverty                           | 13%          | 14.6%                                                     | 11.7%         | 7.7%                         |
| Linguistically Isolated Households                    | 5%           | 16%                                                       | 12.5%         | 3.5%                         |
| Using Public Transportation to<br>Work                | 18%          | 16%                                                       | 21%           | 12%                          |
| Households with No Vehicle<br>Available               | 9%           | 16%                                                       | 17%           | 10.5%                        |
| Housing Units                                         | 836          | 20,716                                                    | 52,328        | 302,378                      |
| Owner-Occupied Households                             | 56%          | 45%                                                       | 40%           | 62%                          |
| Renter-Occupied Households                            | 44%          | 55%                                                       | 60%           | 38%                          |
| Vacant Residences                                     | 6.5%         | 4.5%                                                      | 3.8%          | 5.2%                         |

Source: U.S. Census Bureau, Census 2000, Summary File 3

Note: The U.S. Census Bureau defines Hispanic or Latino as a person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin regardless of race. Thus, Hispanics may be any race. Because Hispanics may be any race, data in this table for Hispanics overlap with data for racial groups.



### West Lanham Hills Community Facilities

| Facility Name                                       | Type of Facility   |
|-----------------------------------------------------|--------------------|
| Ascension Lutheran School                           | Educational        |
| Glenarden Woods Elementary School                   | Educational        |
| Judge Sylvania W. Woods Elementary School           | Educational        |
| Landover Hills Post Office                          | Post Office        |
| New Carrollton MARC / Metro / Amtrak Station        | Transportation     |
| First Baptist Church                                | Religious          |
| St. Christopher's Episcopal Church                  | Religious          |
| U.A. Mechanical Trade School                        | Educational        |
| West Lanham Hills Community Center                  | Recreational       |
| West Lanham Hills Neighborhood Park                 | Recreational       |
| West Lanham Hills Volunteer Fire Department Co. #28 | Emergency Services |

Source: ADC Greater Washington, D.C., 8<sup>th</sup> Edition; Prince George's County Office of Information and Communications Geographic Information Systems, 2007

#### A.16.4. Access and Mobility

The neighborhood is adjacent to a major multi-modal transportation hub served by the Metrorail Orange Line, Amtrak, and MARC Penn Line trains at the New Carrollton Metro Station, as well as bus lines provided by Metrobus, TheBus, and Greyhound intercity bus service. Bus lines in the neighborhood operate along major roadways, such as Veterans Parkway, Annapolis Road, and Ardwick Ardmore Road. Due to its proximity to transit facilities, the area is included in county transit-oriented development planning efforts.

The percentage of the neighborhood's population (18 percent) that uses some type of public transportation to commute to work is less than the entire study area (21 percent), but more than Montgomery County (13 percent) and Prince George's County (12 percent). The percentage of the neighborhood's households with no vehicle available (9 percent) is less than the study area (17 percent) and Prince George's County (11 percent).

#### A.16.5. Population and Employment Projections

Both population and employment are anticipated to grow at substantial rates between 2000 and 2030 in New Carrollton.

| Population |       |                                      | Employment |        |                                      |
|------------|-------|--------------------------------------|------------|--------|--------------------------------------|
| 2000       | 2030  | Projected Total Change<br>(% Change) | 2000       | 2030   | Projected Total Change<br>(% Change) |
| 3,726      | 8,089 | +4,363 (+117%)                       | 8,254      | 16,707 | +8,453 (+102%)                       |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.

Employment in New Carrollton is expected to remain a mix of office, retail, industrial, and other employment.





| Employment Sector |       |                   |       |                       |       |                  |       |
|-------------------|-------|-------------------|-------|-----------------------|-------|------------------|-------|
| Office Employment |       | Retail Employment |       | Industrial Employment |       | Other Employment |       |
| 2000              | 2030  | 2000              | 2030  | 2000                  | 2030  | 2000             | 2030  |
| 2,485             | 4,776 | 1,399             | 3,081 | 1,332                 | 2,768 | 3,038            | 6,082 |

Source: Metropolitan Washington Council of Governments, MWCOG/TRP Forecast Version 2.1D#50, 2191 Transportation Analysis Zone Land Use Round 7.0A of COG Cooperative Forecasting Program, October 18, 2006.





## **Appendix B**

### **Land Use Maps**



